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ENTSU-JI AND GENERALIFE:

LANDSCAPE AND ARCHITECTURAL GARDENS

© Stephen Schofield

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ENTSU-JI AND GENERALIFE: LANDSCAPE AND ARCHITECTURAL GARDENS

Stephen Schofield

ABSTRACT

Generalife Garden above Granada, Spain and Entsu-ji Garden outside Kyoto, Japan, will be examined in order to discuss the approach to nature in two general categories: the architectural garden and the landscape garden. The manipulation of the interior elements, rocks, plants and water in these two gardens indicate two different views of the relationship of humanity to nature. The relationship of the host cities to the gardens as well as the architecture of the connecting buildings to the gardens play a complementary and supporting role for the separateness of humanity and nature in the architectural garden and the integration of humanity and nature in the landscape garden.

ACKNOWLEDGEMENTS

I would like to acknowledge the assistance offered by the following people: Ann Lyons, Michael Molloy, Dorothy Prosser, Bill Prosser, Jean Schofield and Mikako Wada.

I would like to acknowledge in particular the support and encouragement of the late Dr. Theodore Heinrich.

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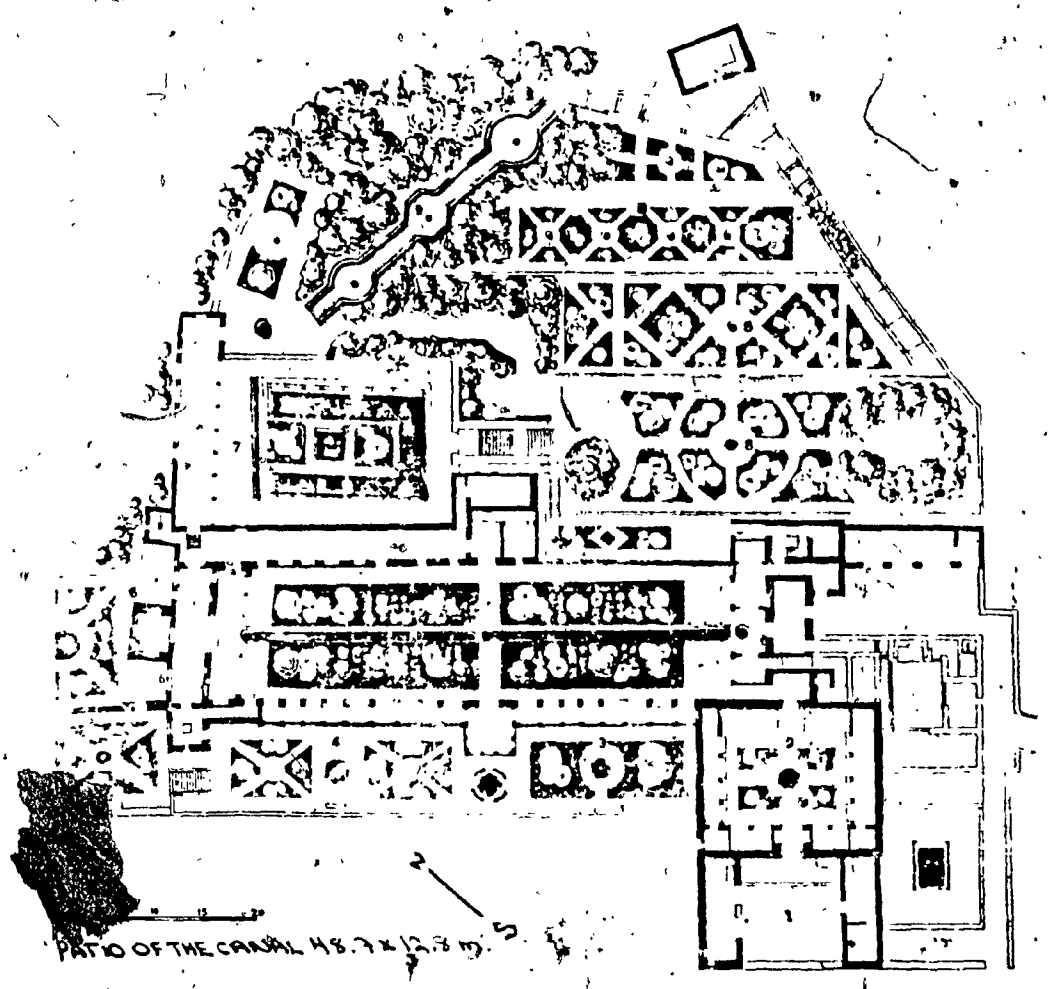

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Source: Francisco Preito-Moreno, Los Jardines de Granada (Madrid: Editorial Ciguena, 1952), p. 87.

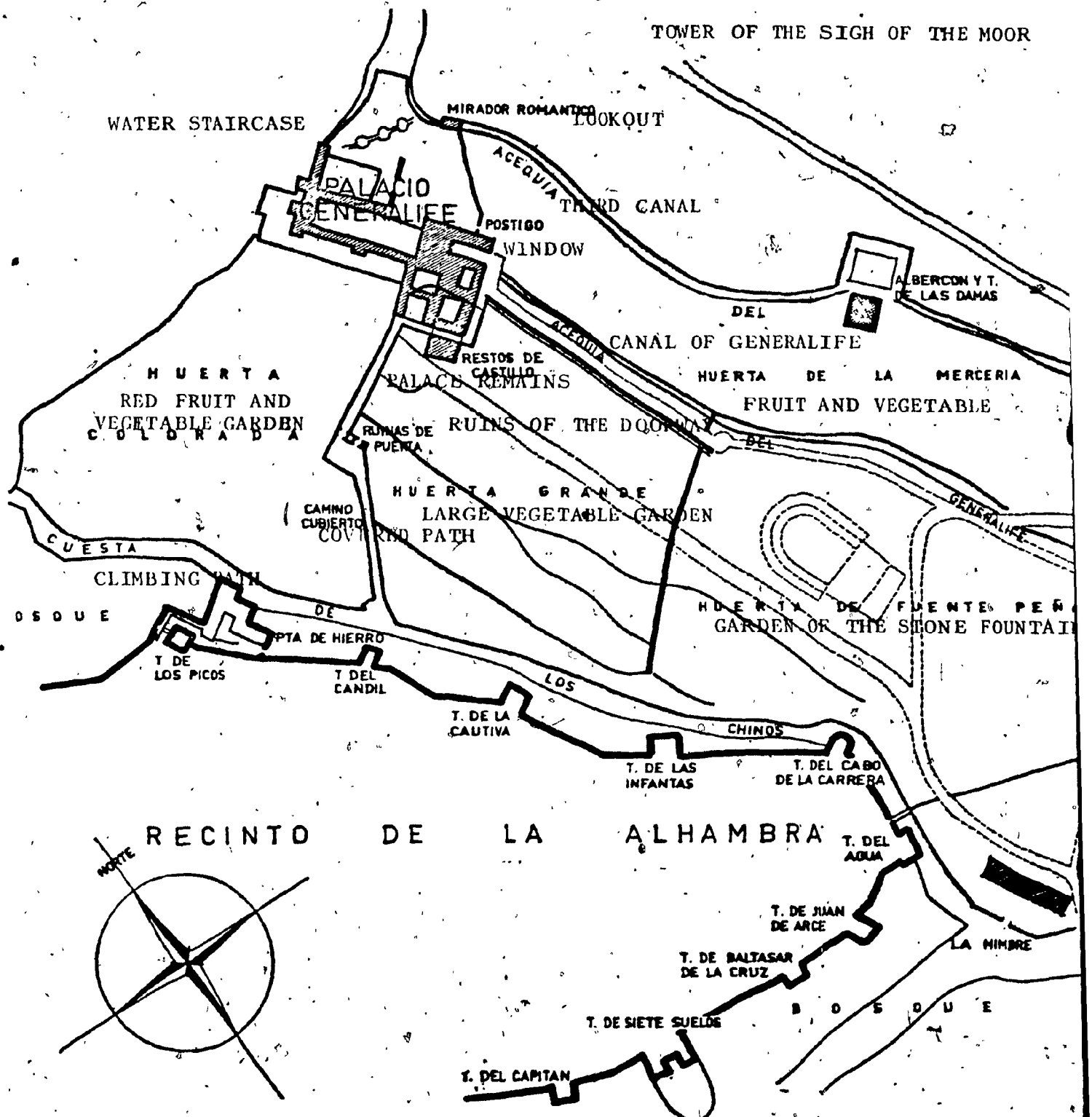

Fig. 2: Palace and Gardens of Genralife After 1959

Source: Jesus Bermudez Pareja, "El Generalife despues del incendio de 1958", Guadernos de la Alhambra, Vol. 1 (Granada: Patronato de la Alhambra y Generalife, 1965).

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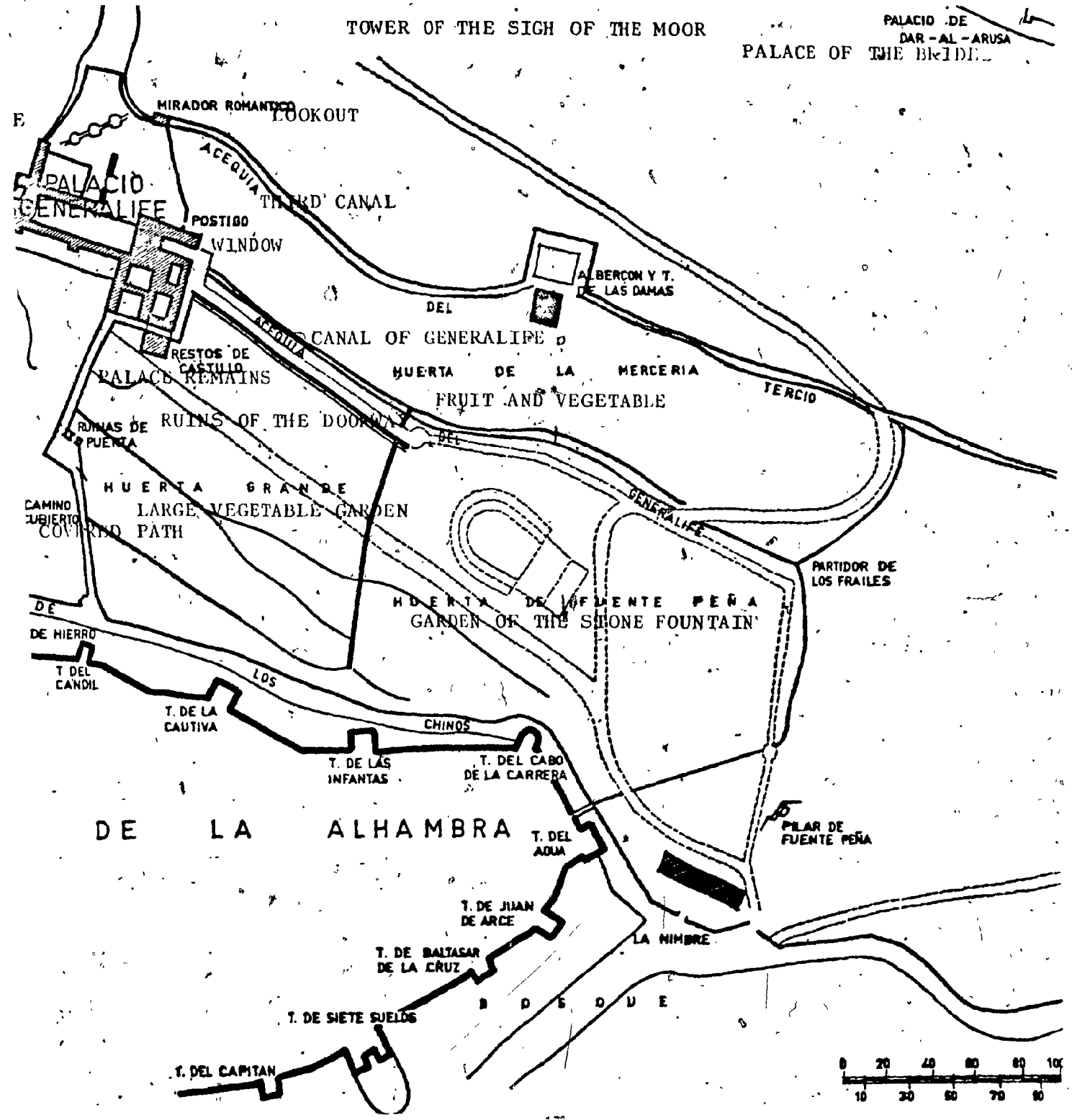

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reja, "El Generalife despues del incendio de
de la Alhambra, Vol. 1 (Granada: Patronato
Generalife, 1965).

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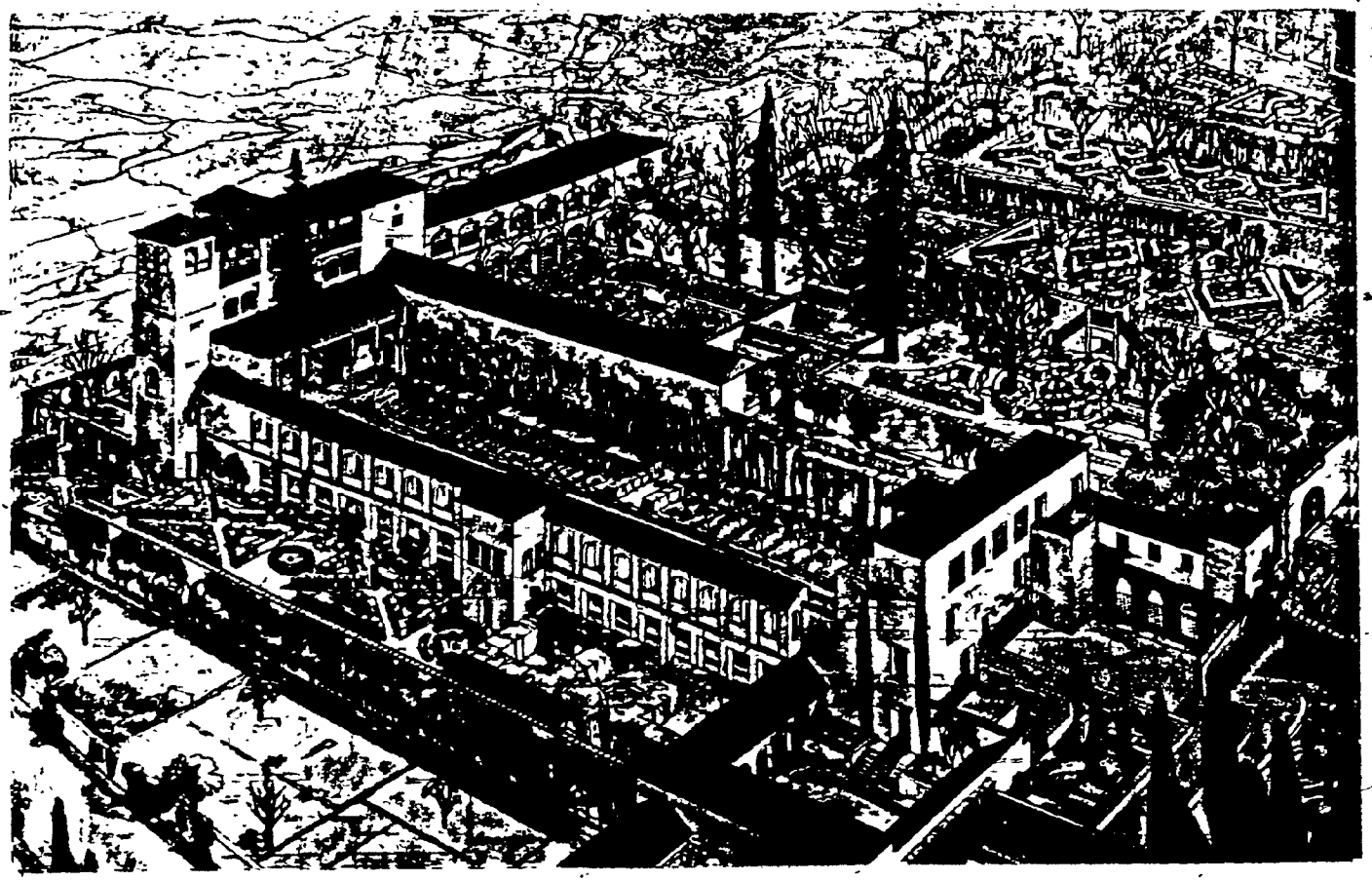
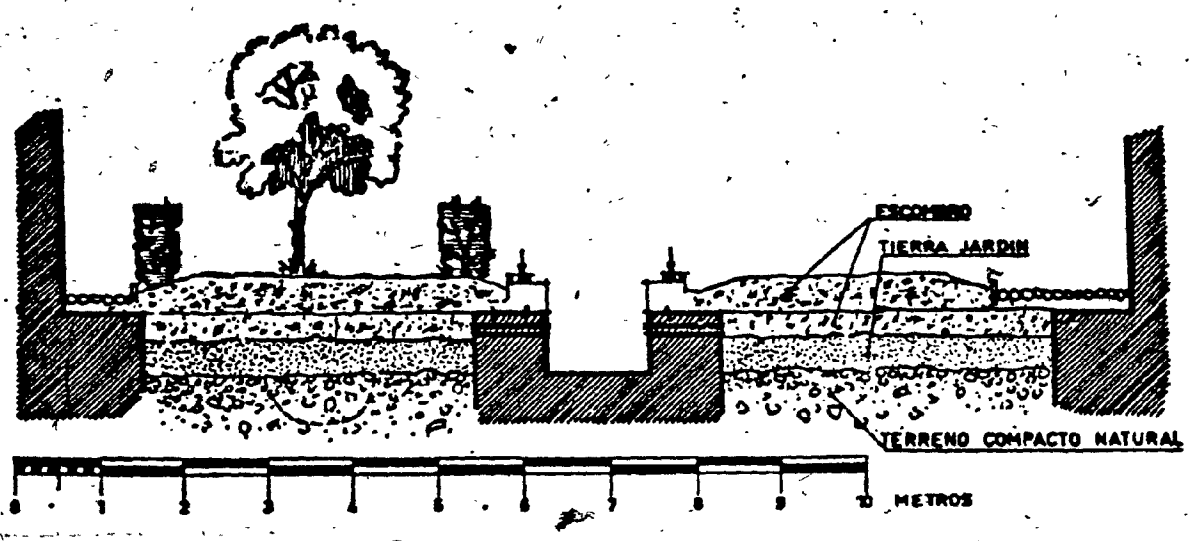


Fig. 3: Aerial view of the Generalife compound

Source: Francisco Preito-Moreno, Los Jardines de Granada, p. 93.



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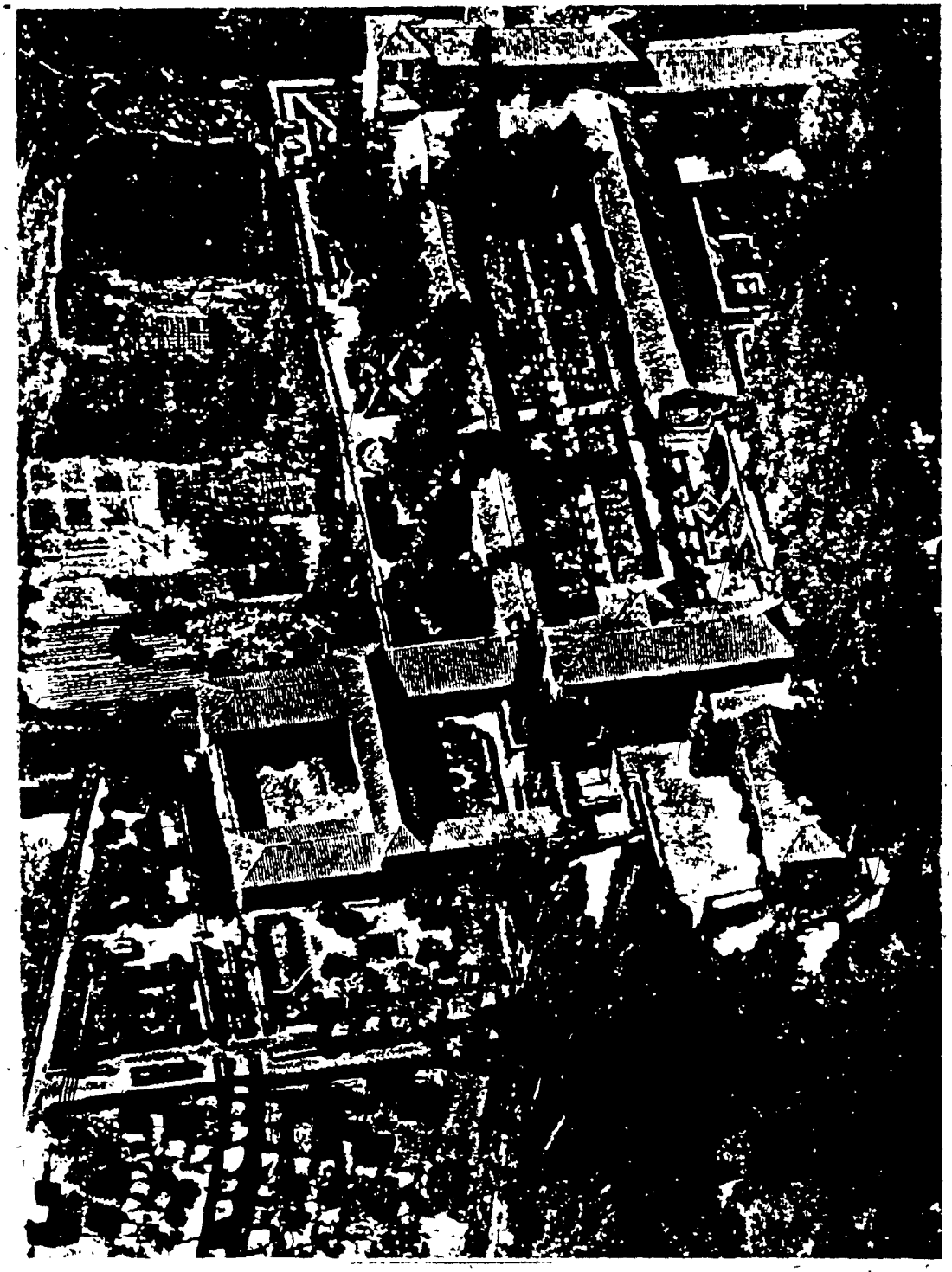
Source: Francisco Preito-Moreno, Los Jardines de Granada, p. 93.



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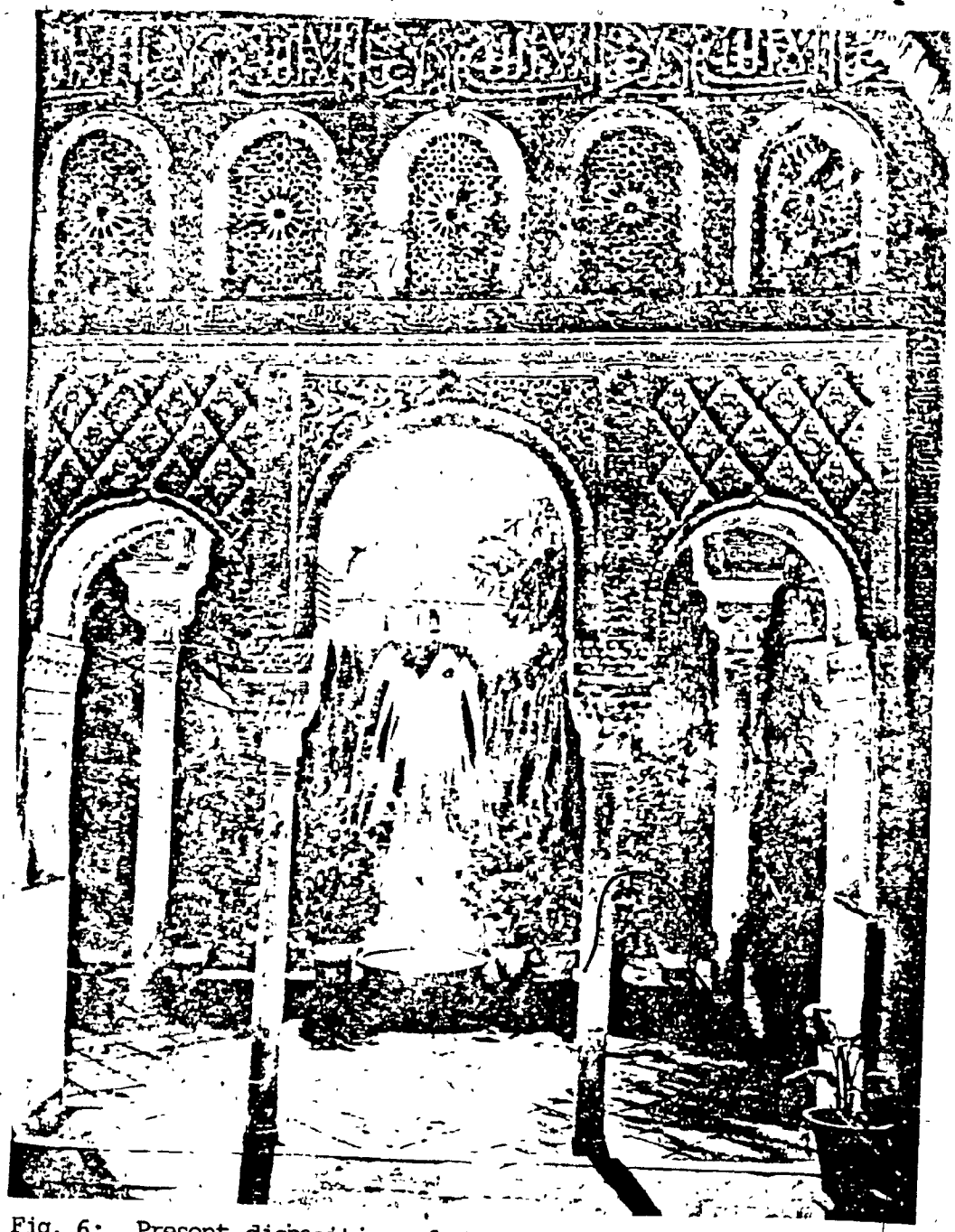
Source: Francisco Preito-Moreno, Los Jardines de Granada, p. 82.



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Source: Marie Luise Gothein, A History of Garden Art (New York: Hacker Art Books, 1966), p. 159.

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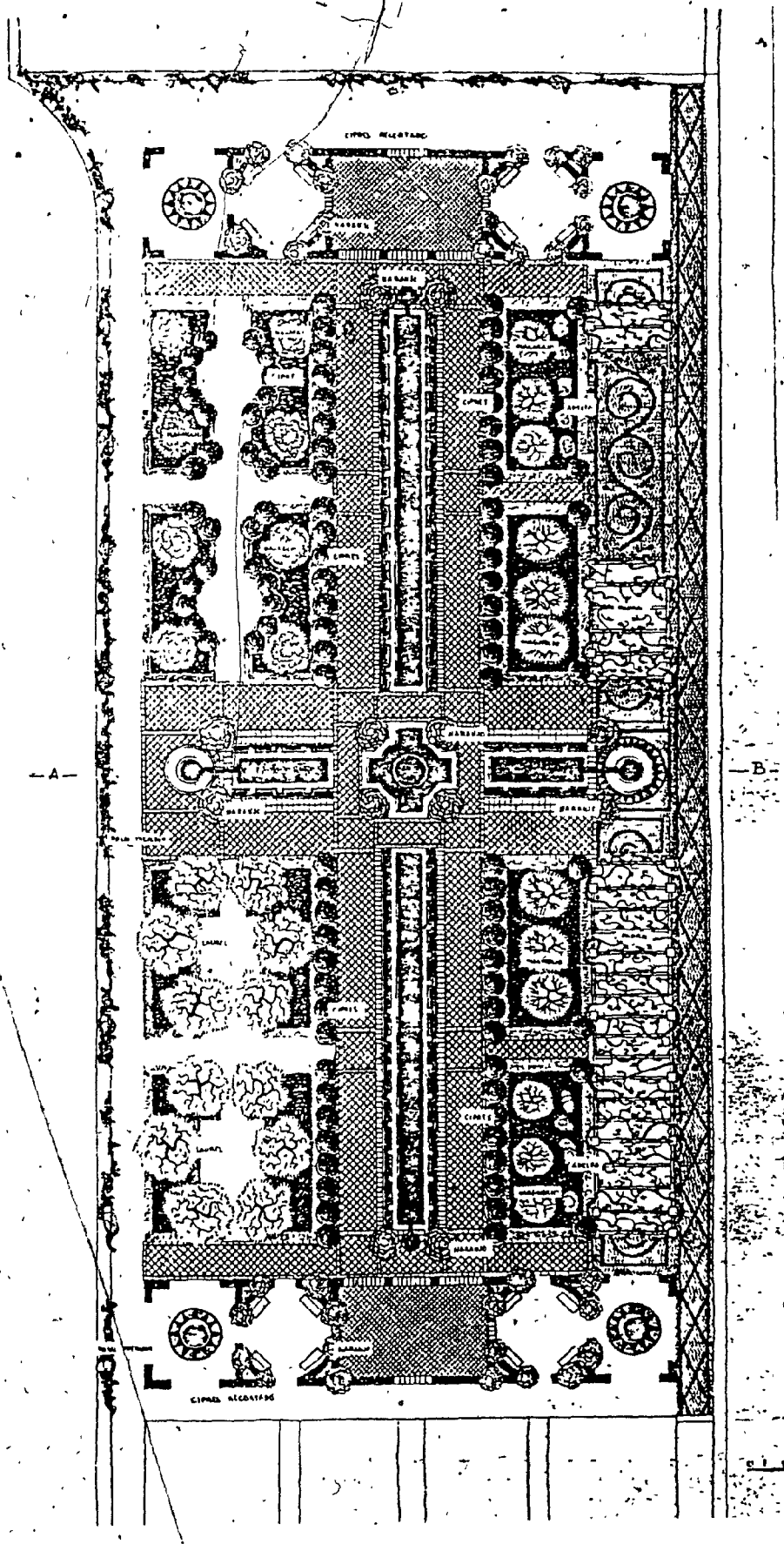
adelfa - oleander parra - grapevine
rose trepador - climbing roses
laurel - laurel.

Source: Francisco Preito-Moreno, p. 122.



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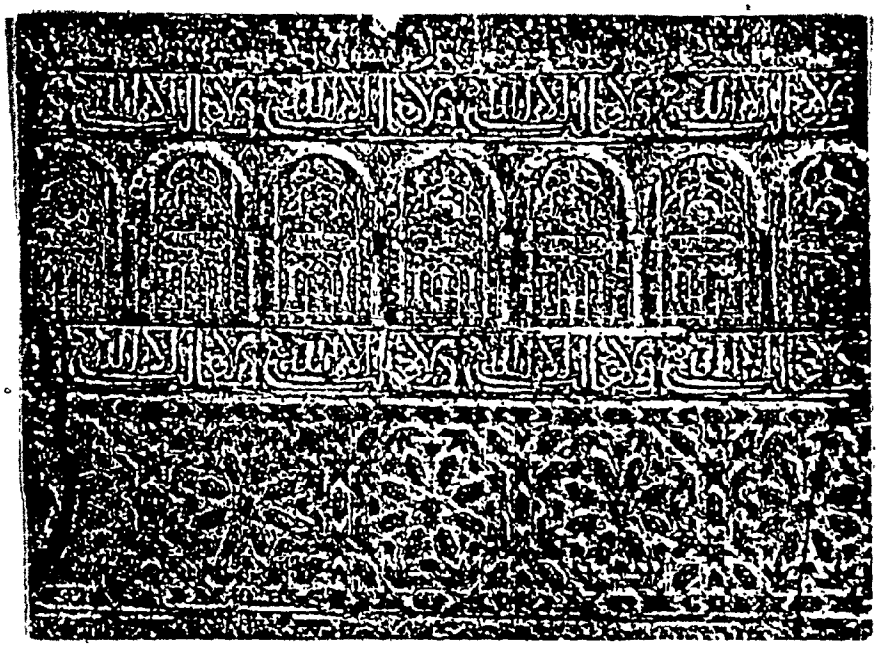
Source: Oleg Grabar, The Alhambra (Cambridge, Massachusetts: Harvard University Press, 1978), p. 58.



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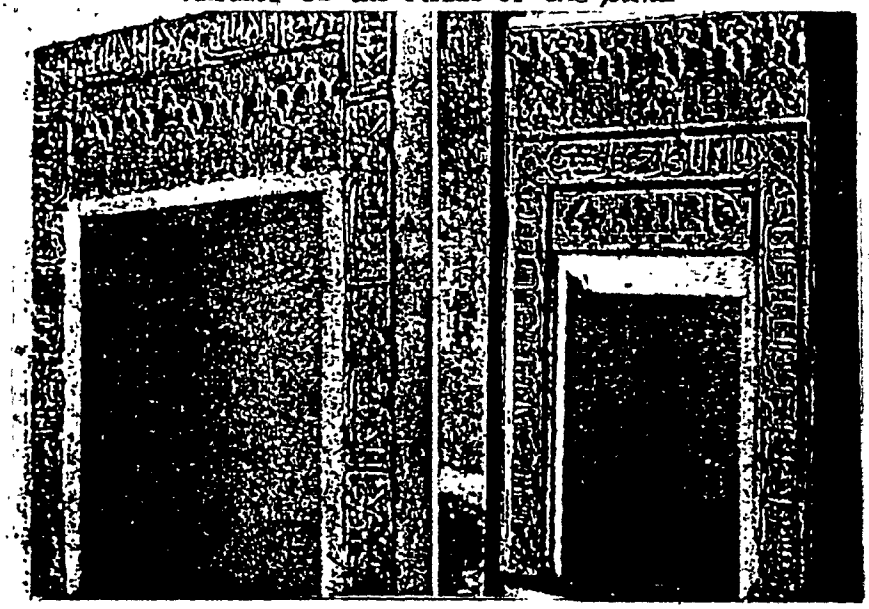

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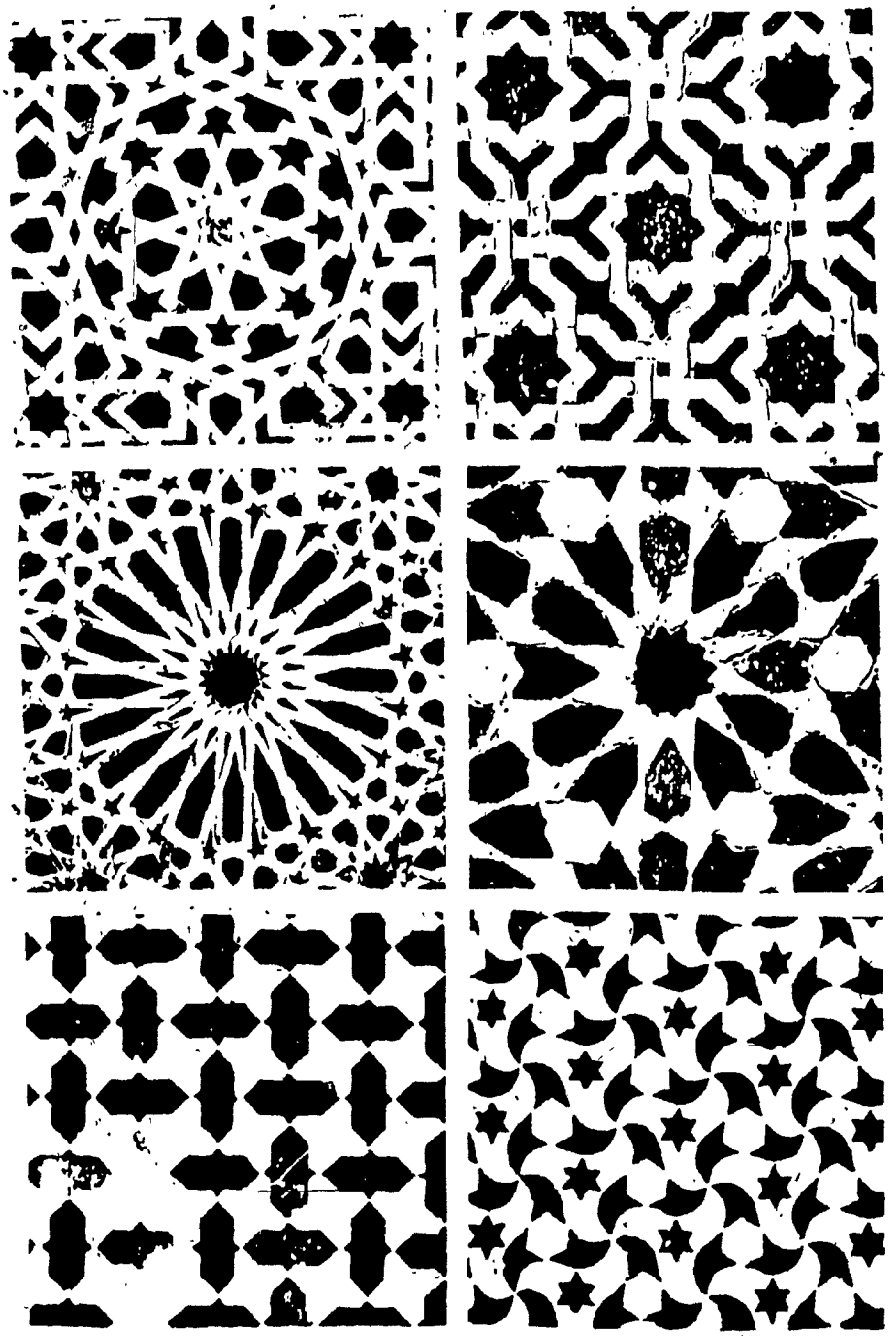
Source: L. Torres Balbas, "Les monumentos cardinales de Espana VII," La Alhambra y el Generalife (Madrid: Editorial Plus Ultra, 1953), p. 145.

Ibid., p. 148.



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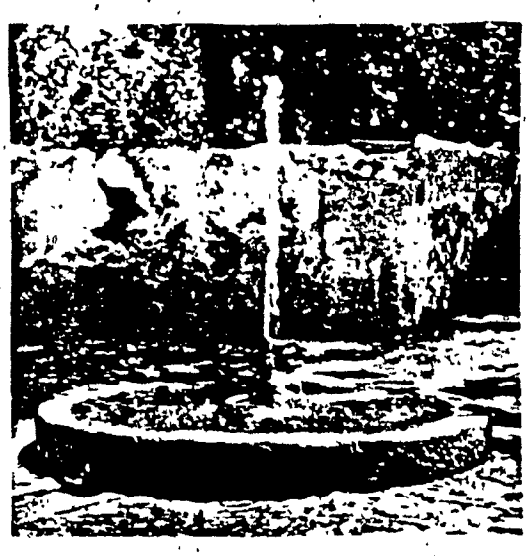
Source: Desmond Steward and others, The Alhambra: A History of Islamic Spain (New York: Newsweek, 1977), pp. 15, 83, 49, 101, 125 and 73.



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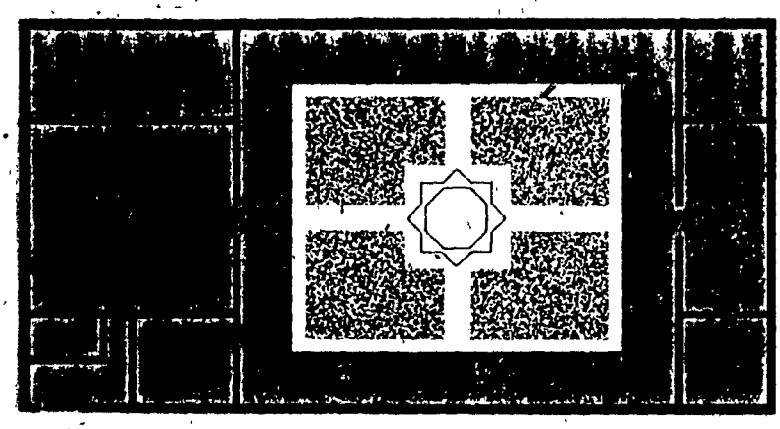
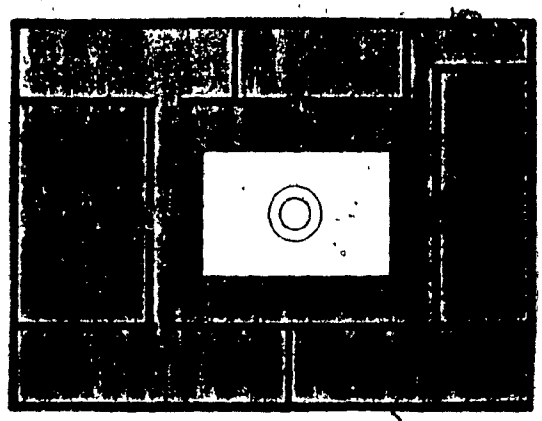
Source: Desmond Steward and others, The Alhambra: A History of Islamic Spain, p. 132.





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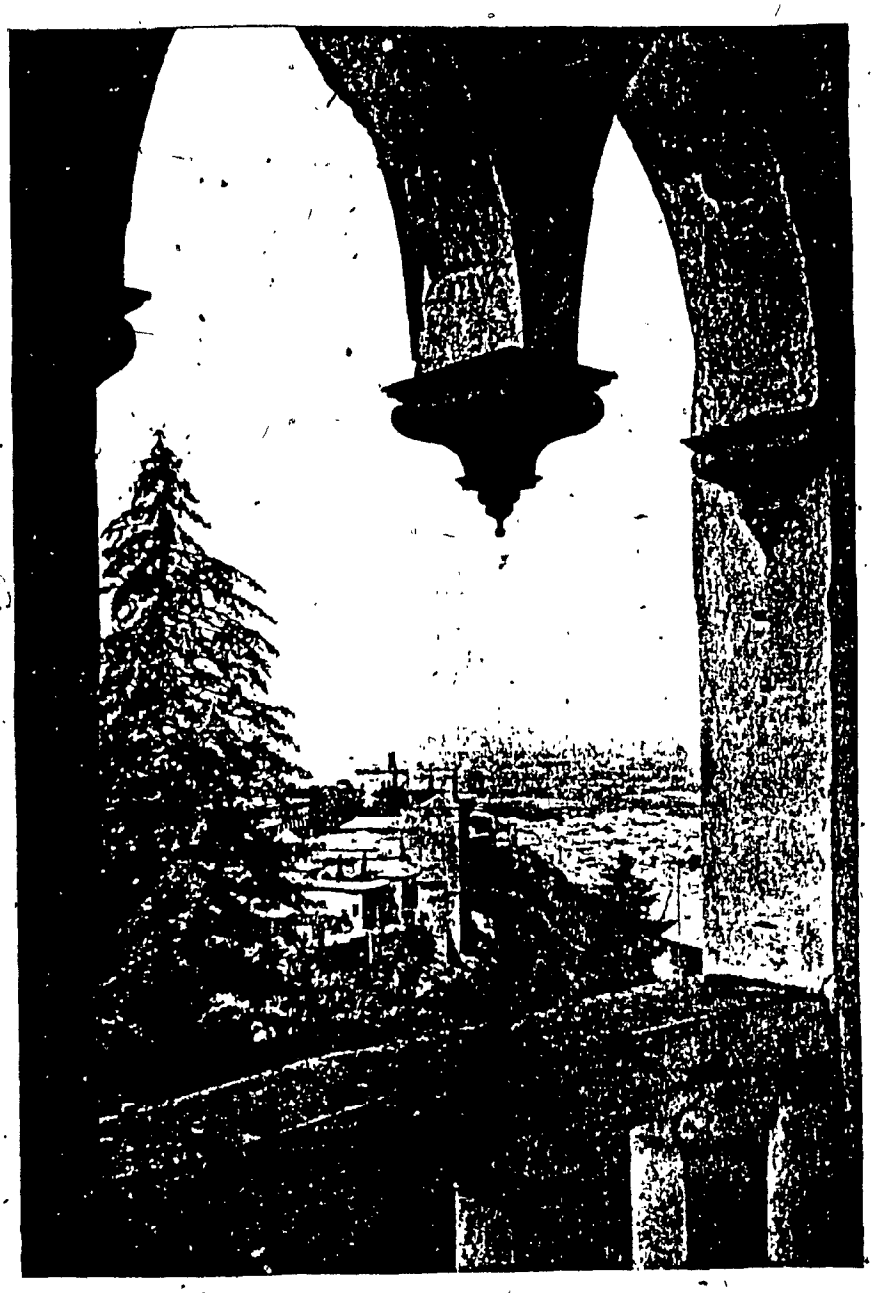
Source: Desmond Steward and others, The Alhambra: A History of Islamic Spain, p. 63.



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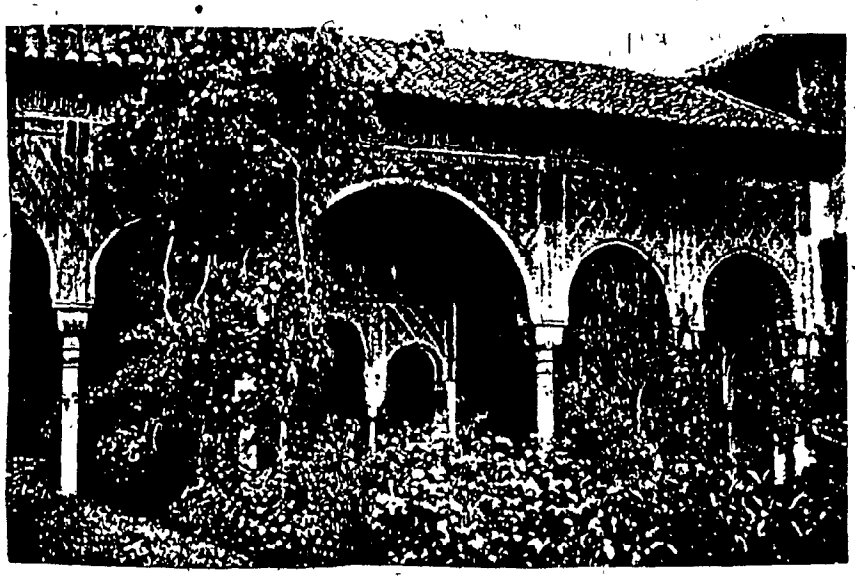
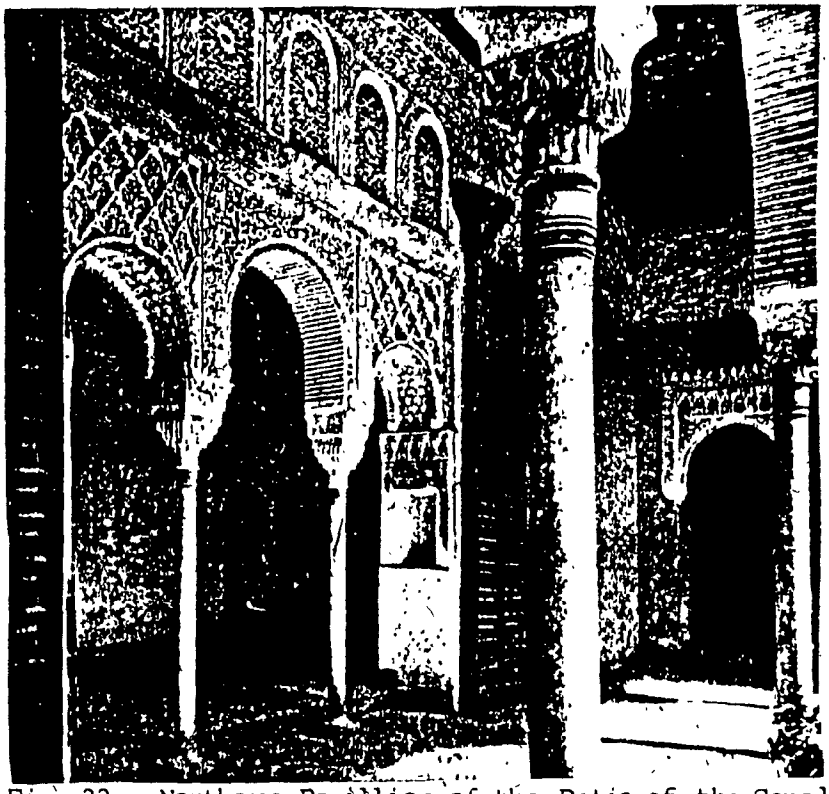
Source: L. Torres Balbas, "Les Monumentos cardinales de Espana VII," pp. 149, 143.





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Source: L. Torres Balbas, "Los Monumentos cardinales de España VII," pp. 145, 147.

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Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning (New York: McGraw-Hill Company, 1981), pp. 104-105.

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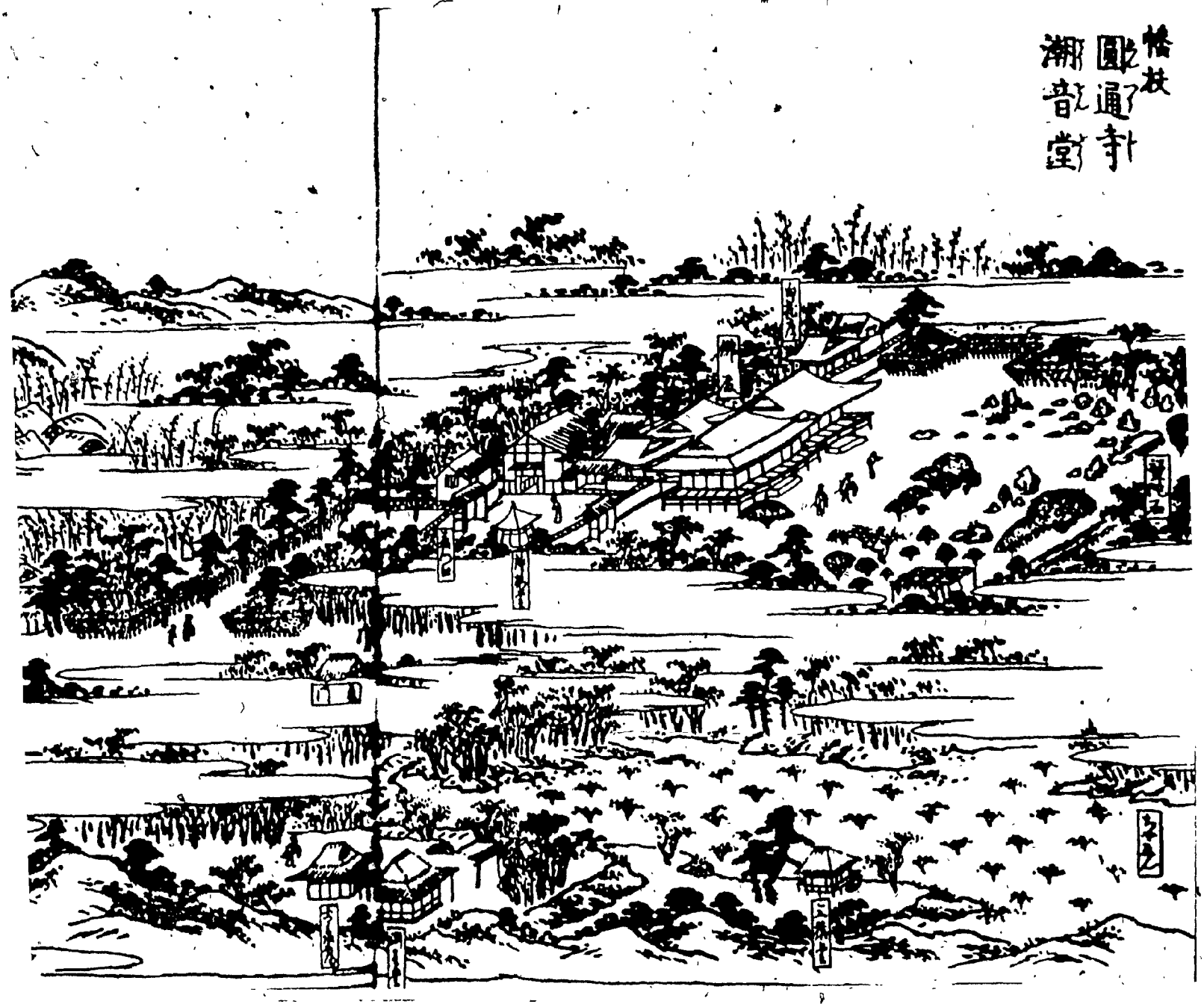

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ell Bring and Josse Wayembergh, Japanese Gardens:
n and Meaning (New York: McGraw-Hill Company,
pp. 104-105.

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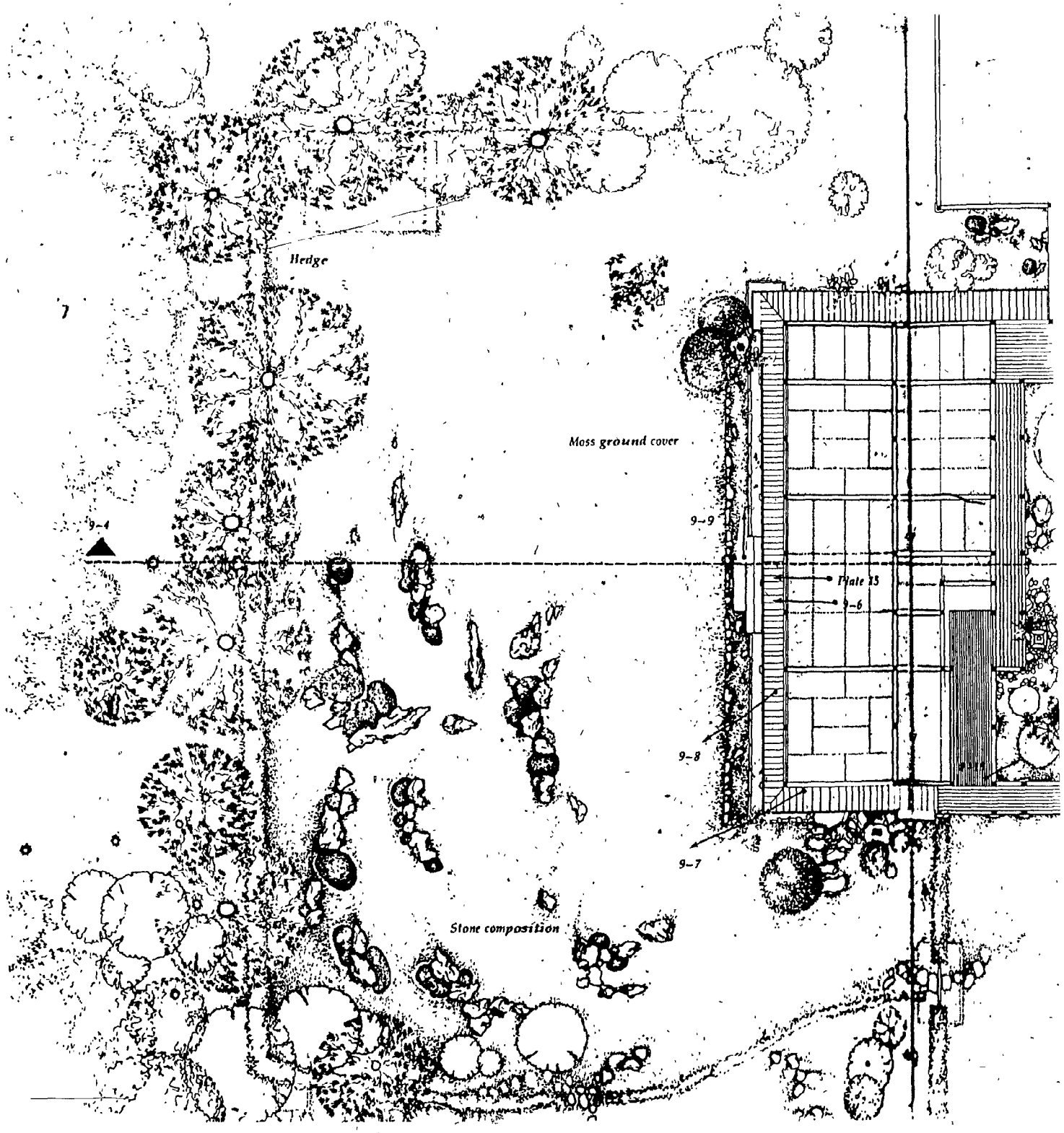
Fig. 25: Aerial plan of Entsu-ji with numbered viewpoints for the following six photographs.

Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, pp. 110-111.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Moss ground cover
9-4
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Plate 15
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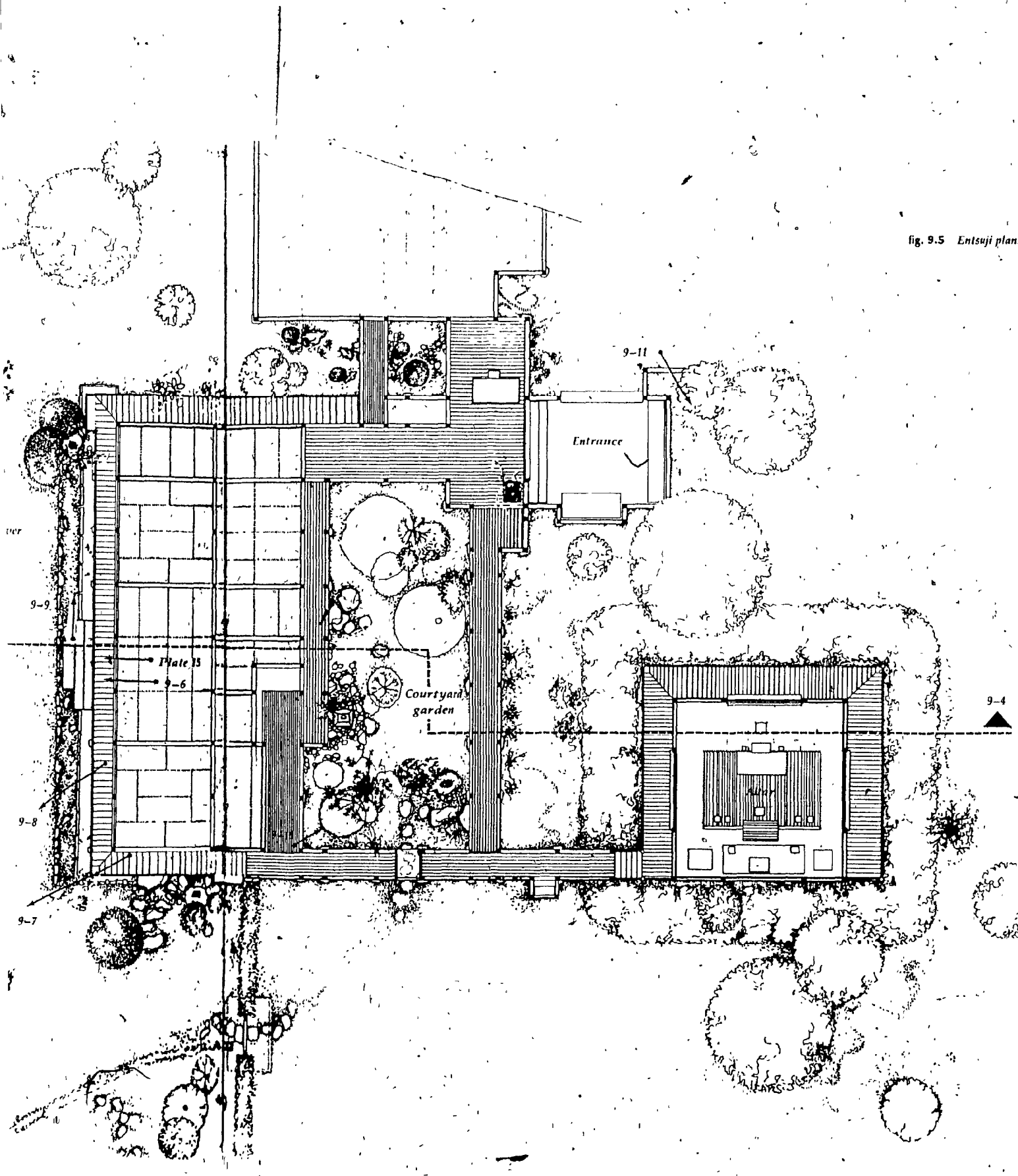
Stone composition



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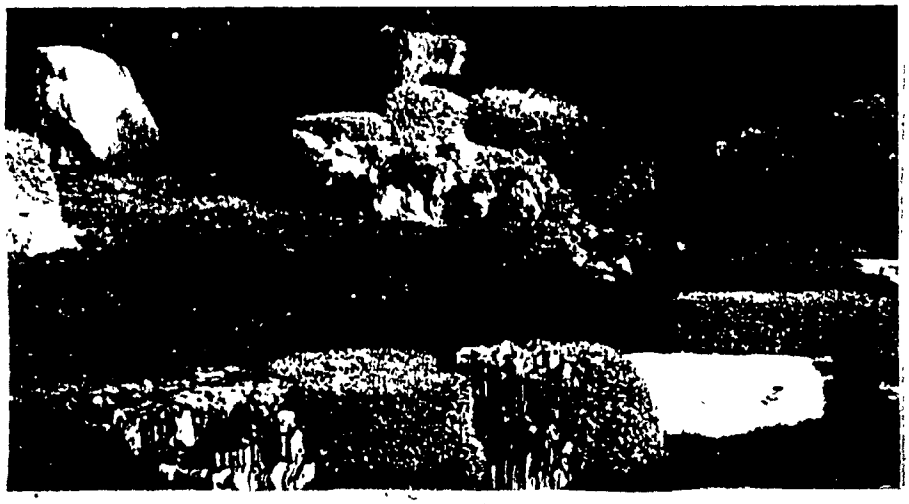

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Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, p. 112.

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(9.9 on the map)

Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, p. 113.

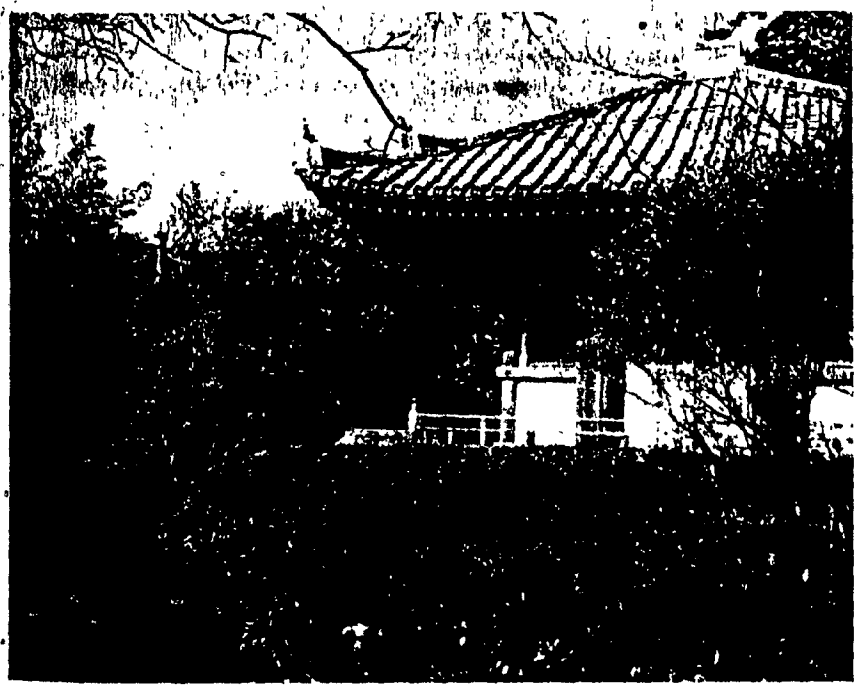

Fig. 31: The altar building (9.11 on the map)

Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, p. 113.

Fig. 32: Sectional view of the Entsu-ji Compound.

Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, pp. 108-109.

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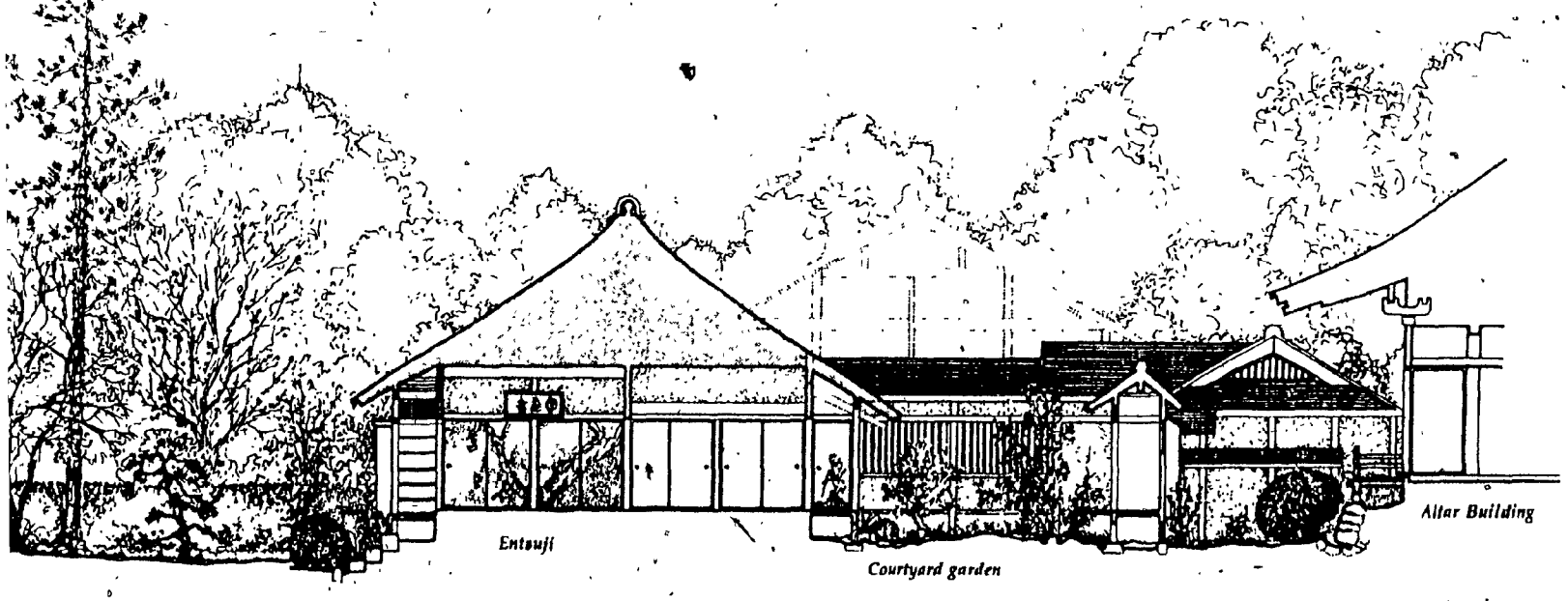
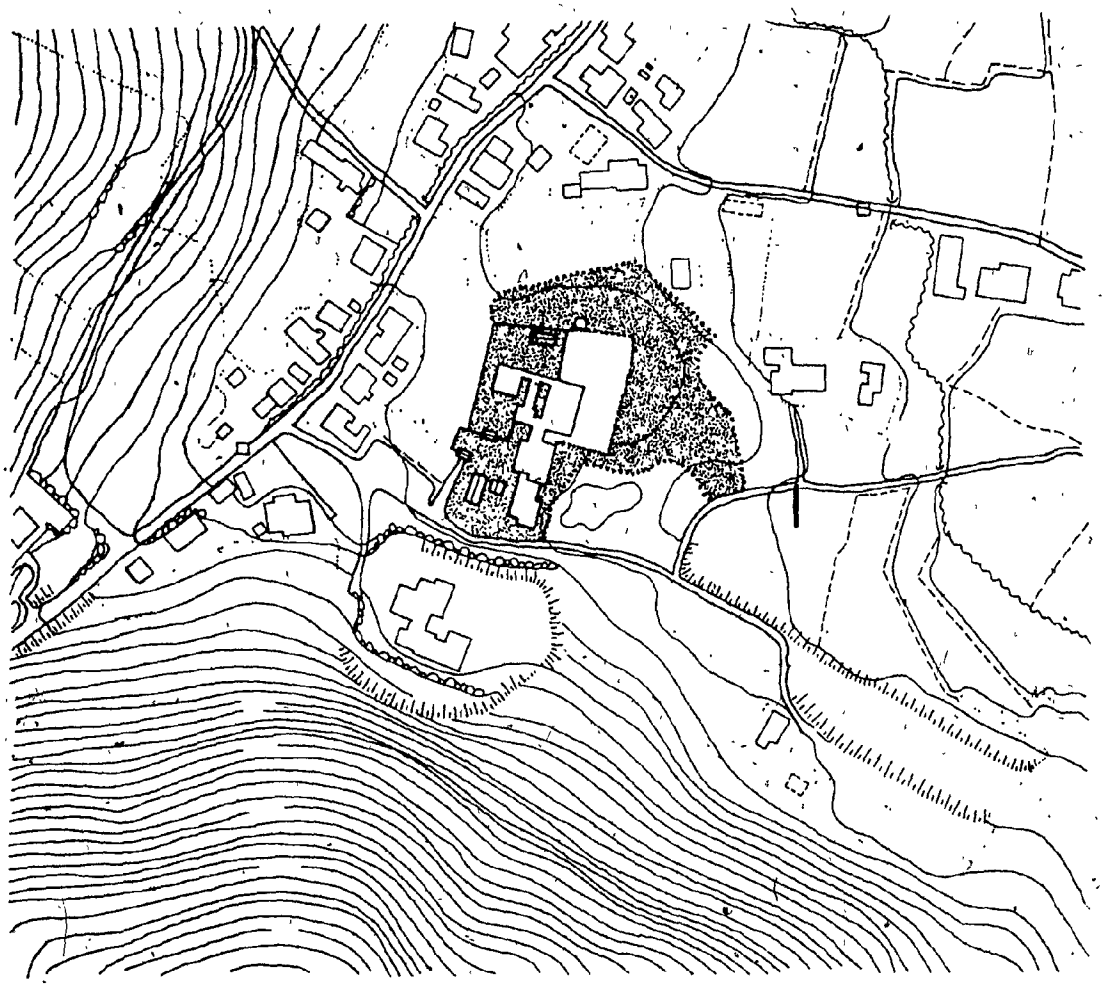


Gardens:



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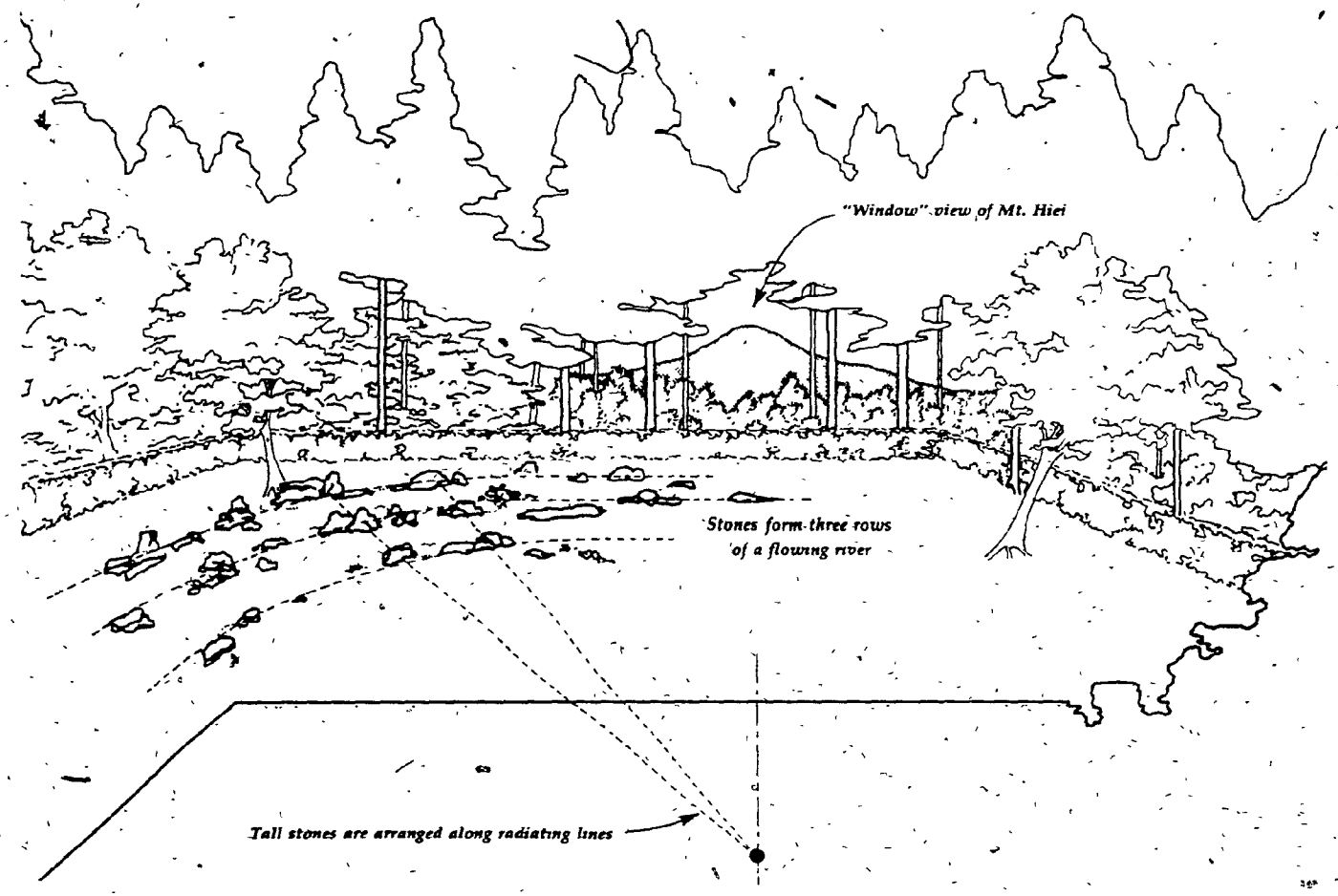
Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, p. 107.



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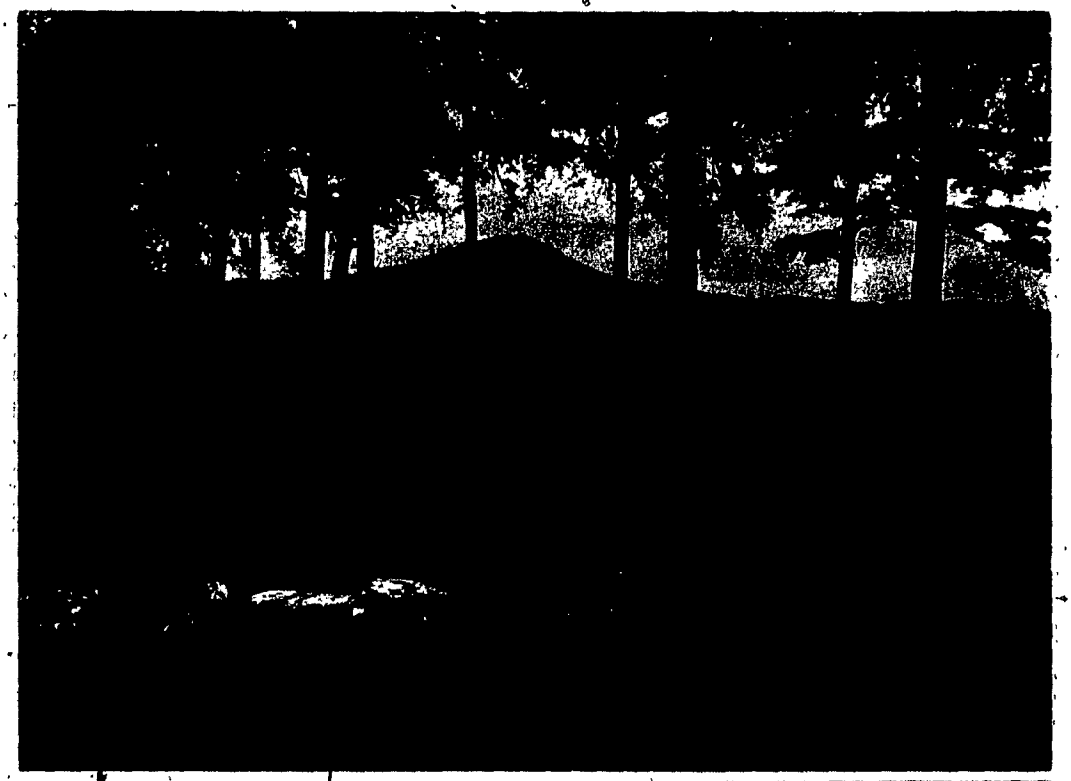
Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, p. 106.



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Source: Postcards from the Japanese Tourist Centre.

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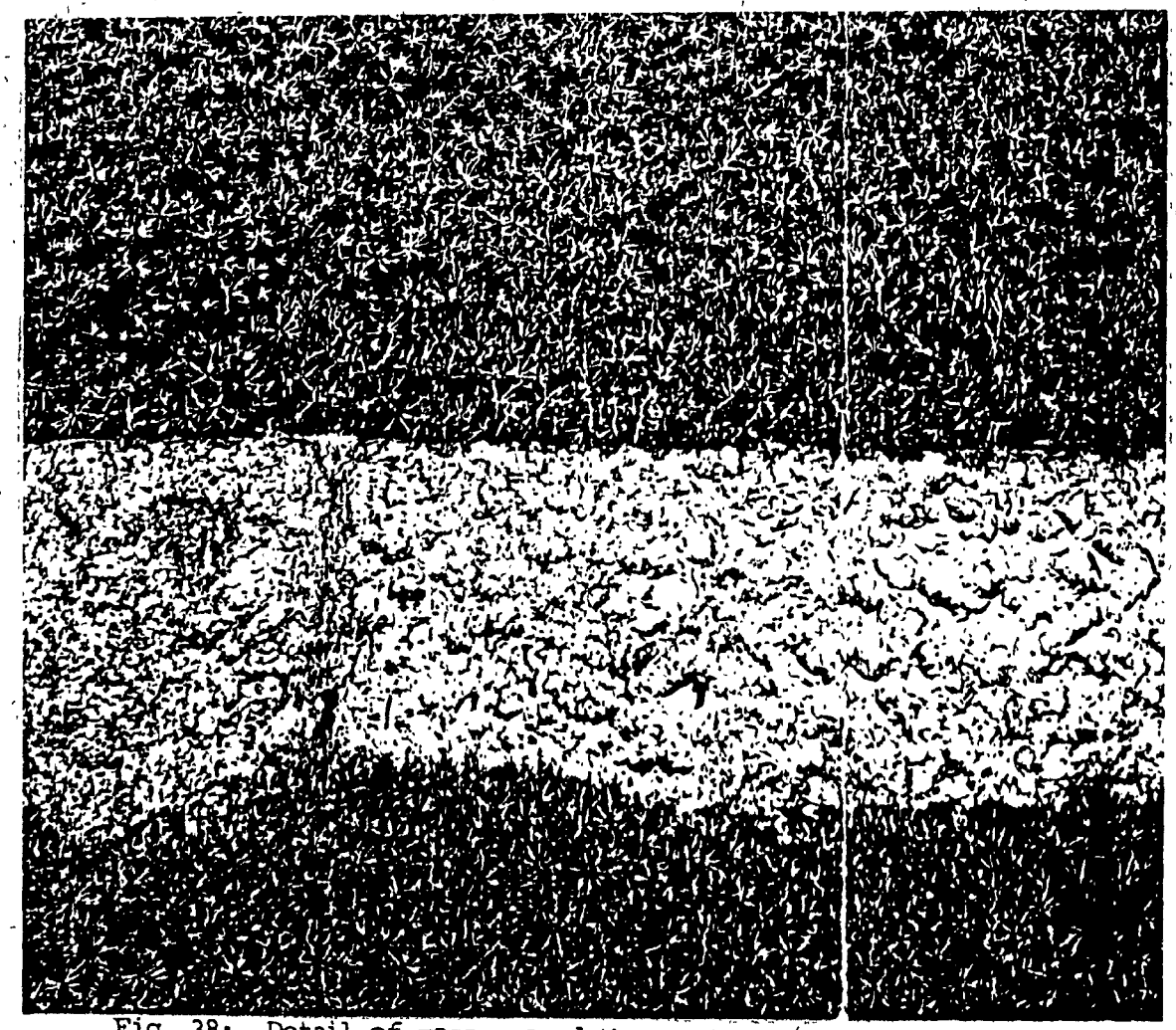
Source: Postcard from the Japanese Tourist Centre.



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Source: Postcard from the Japanese Tourist Centre.

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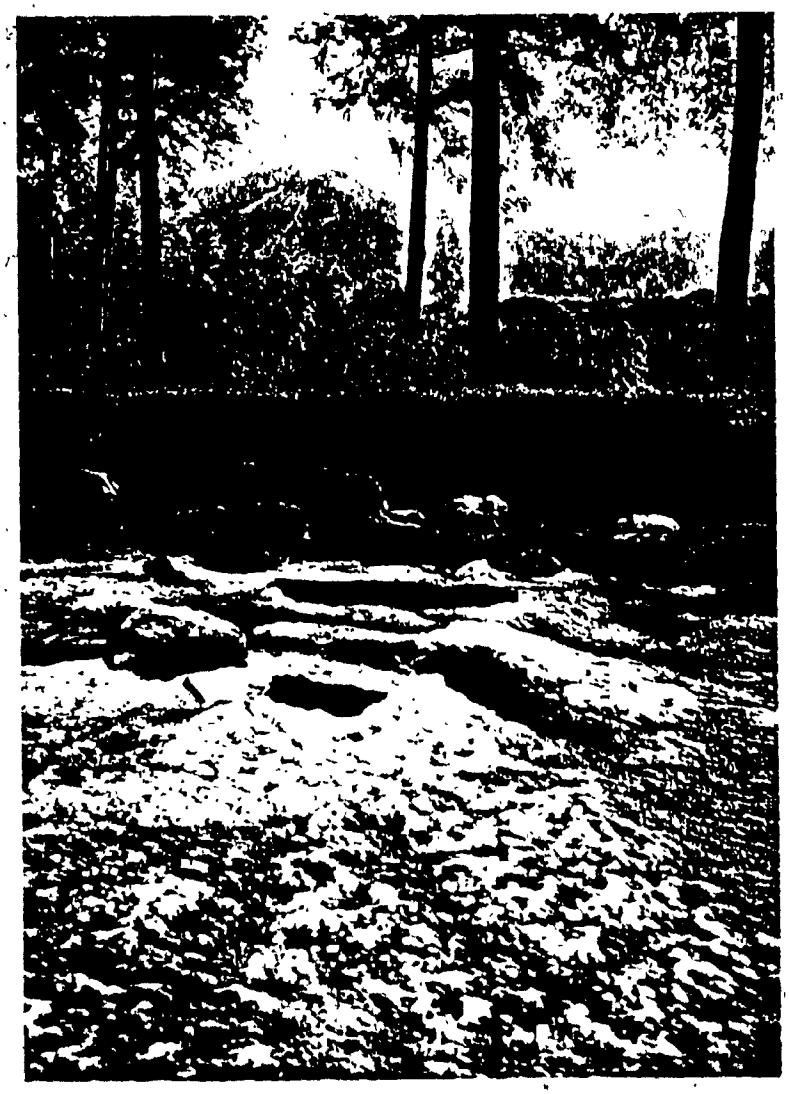
Source: Postcard from the Japanese Tourist Centre.



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Source: Postcard from the Japanese Tourist Centre.

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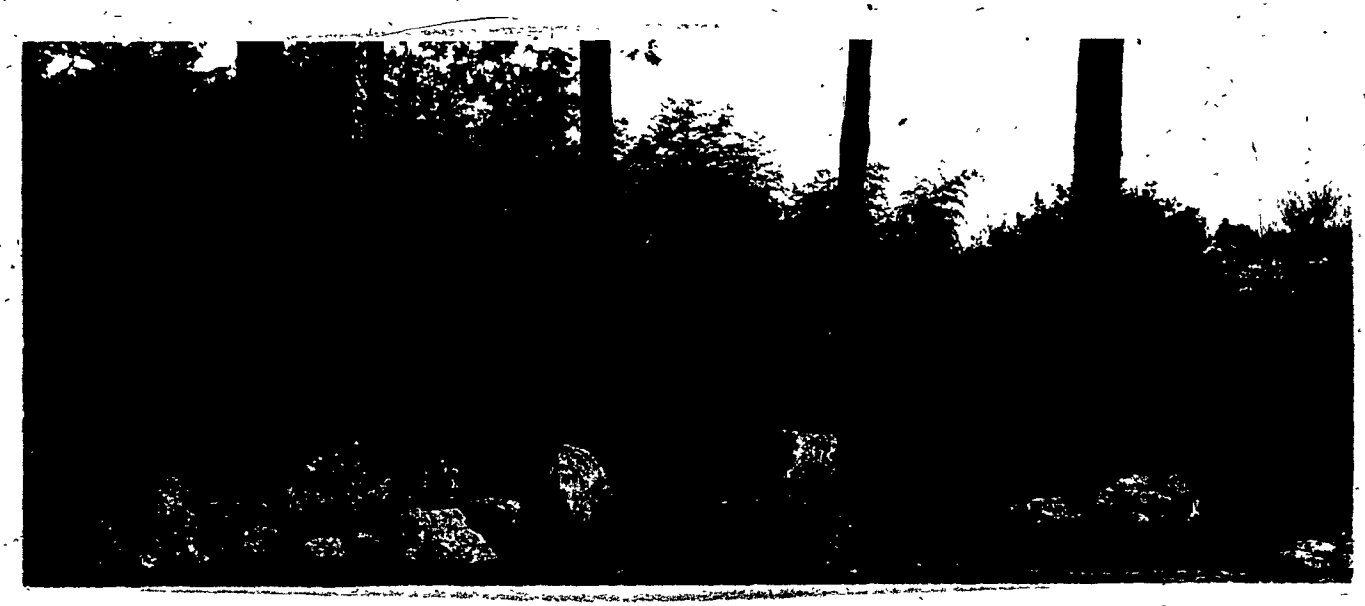
Source: Postcard from the Japanese Tourist Centre.



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Source: Postcard from the Japanese Tourist Centre.

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Source: Teiji Itoh, Space and Illusion in the Japanese Garden (New York: Weatherhill/Tankosha, 1973), Fig. 19.

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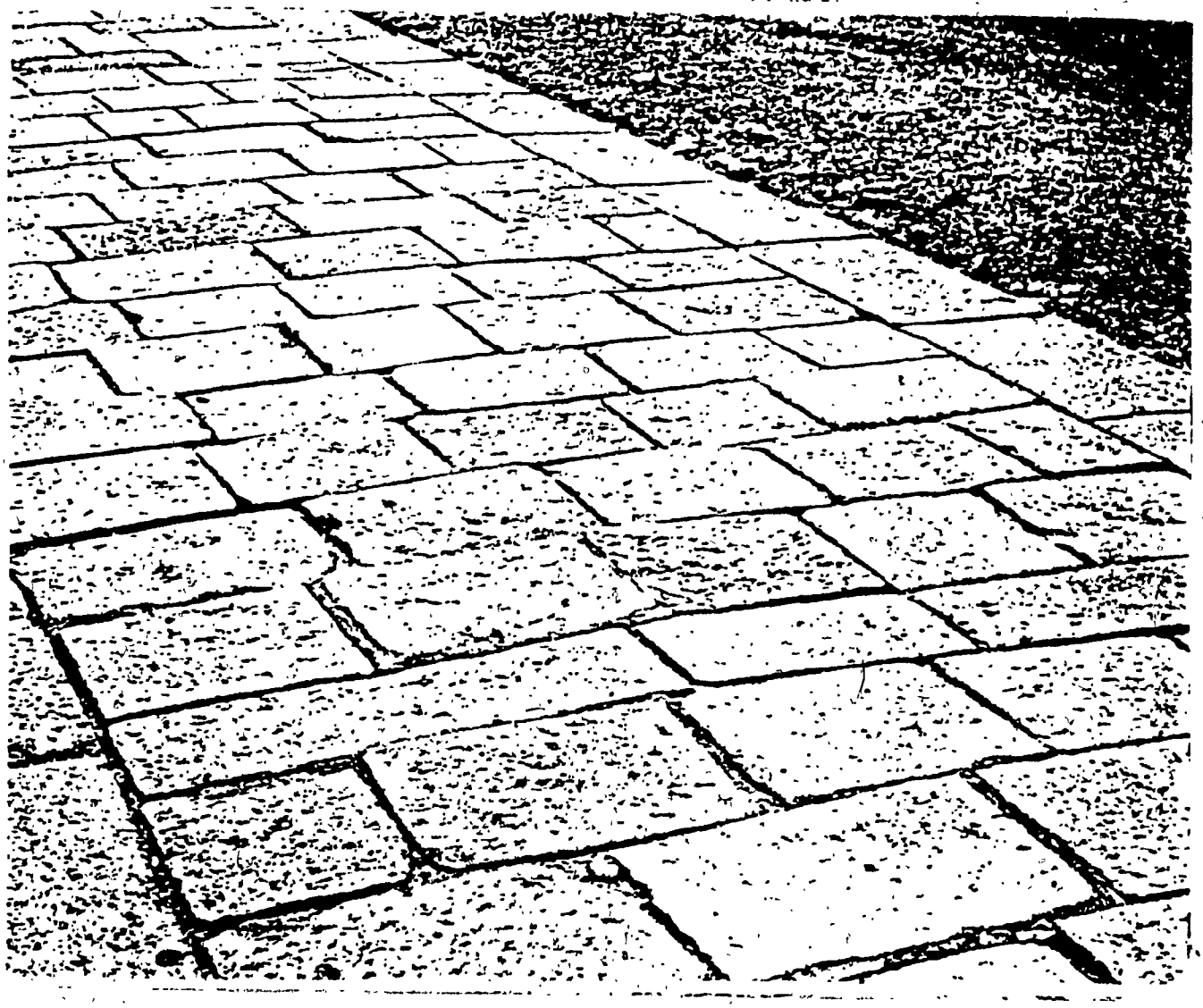
Source: Postcards from the Japanese Tourist Centre.



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Source: Katusuo Saito and Sadaji Wada, Magic of Trees and Stones: Secrets of Japanese Gardening (New York: Japan Publishing Trading Company, 1964), Fig. 15.

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Source: Katusuo Saito and Sadaji Wada, Magic of Trees and Stones, Fig. 17.

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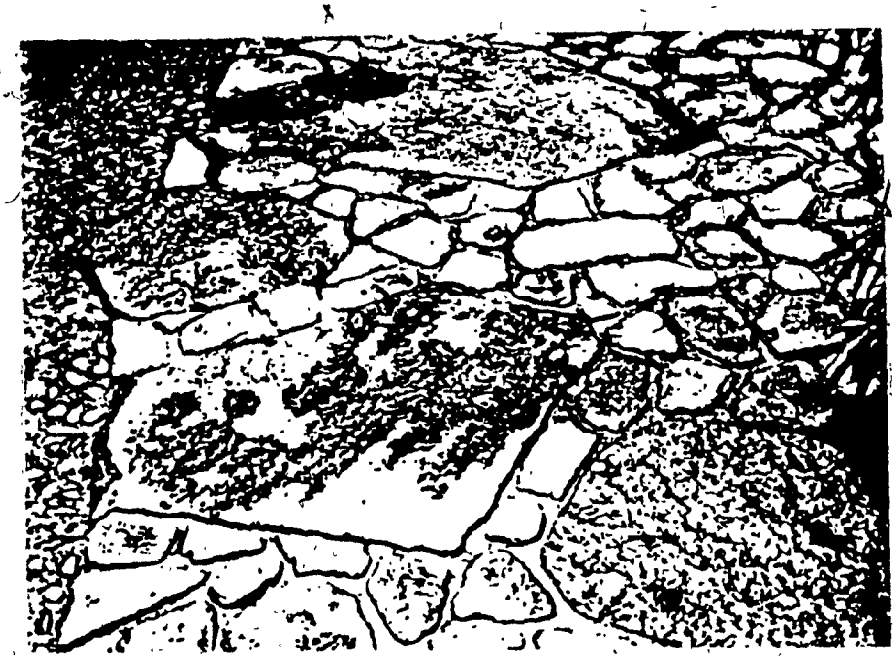

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Source: Katusuo Saito and Sadaji Wada, Magic of Trees and Stones, Figs. 18 and 19.

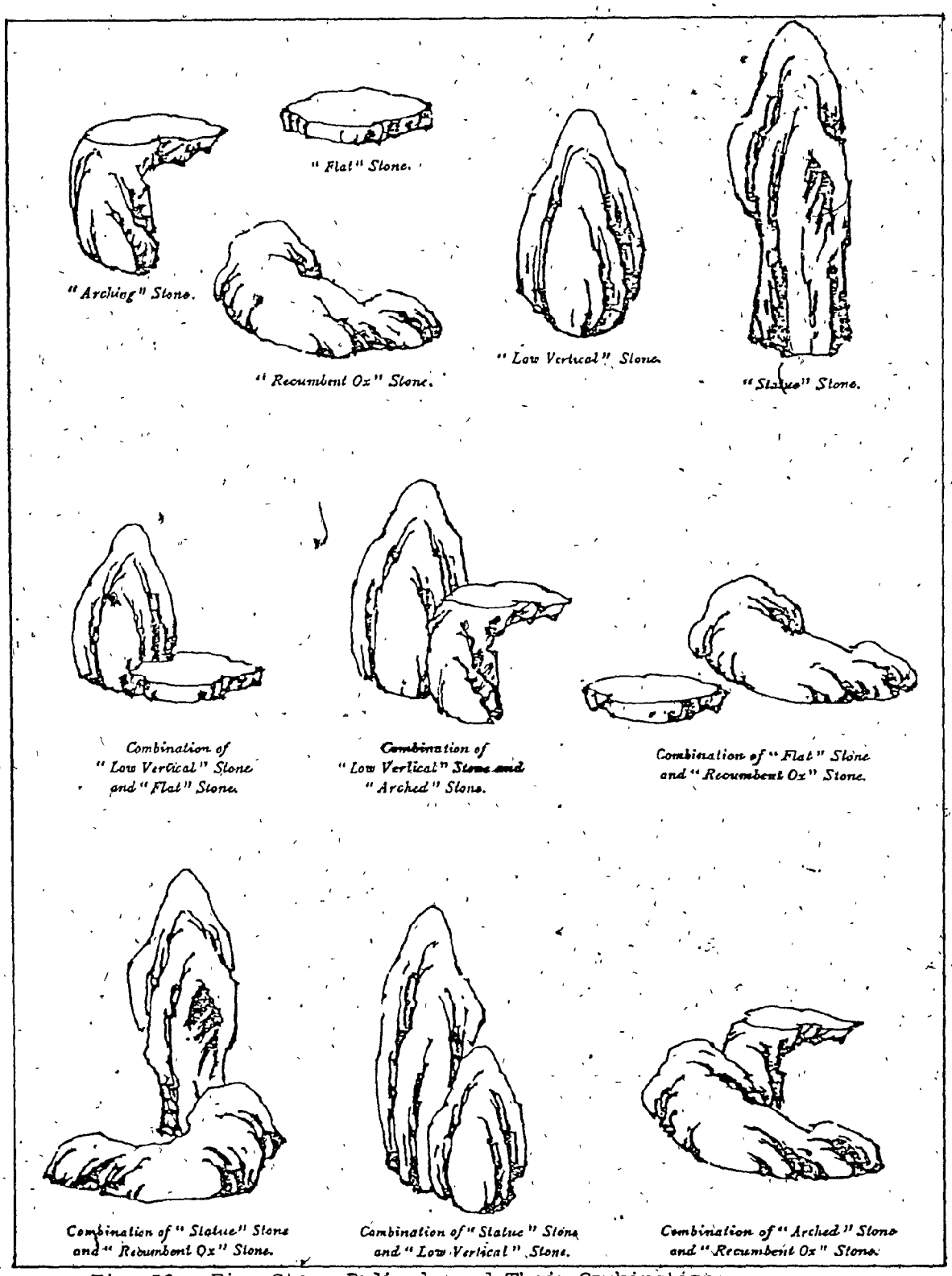
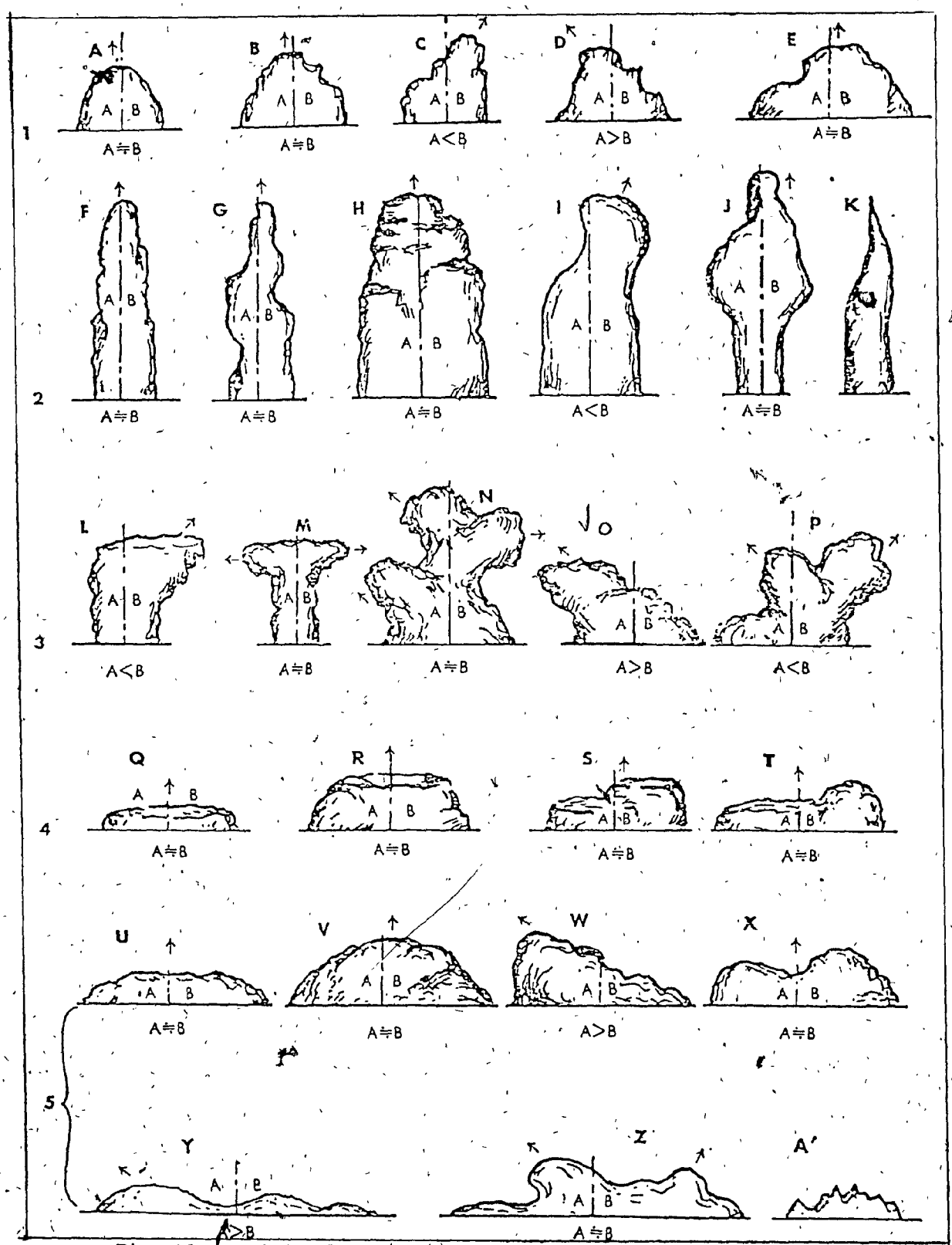


Fig. 50: Five Stone Radicals and Their Combinations.
Source: Josiah Condor, Landscape Gardening in Japan (New York: Dover Publications, Inc., 1964), Plate I.



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Source: Katusuo Saito and Sadaji Wada, Magic of Trees and Stones, Fig. 31.

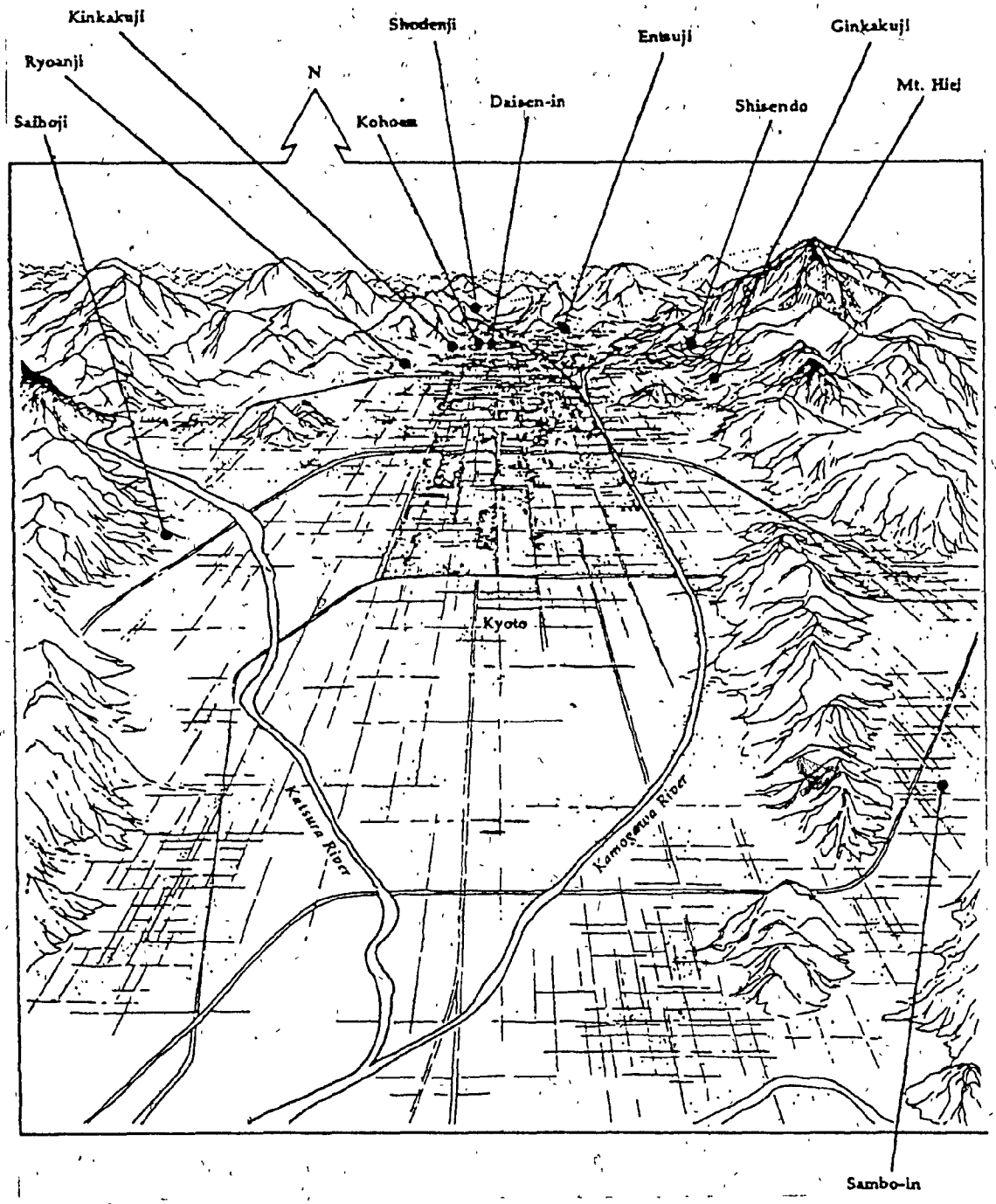
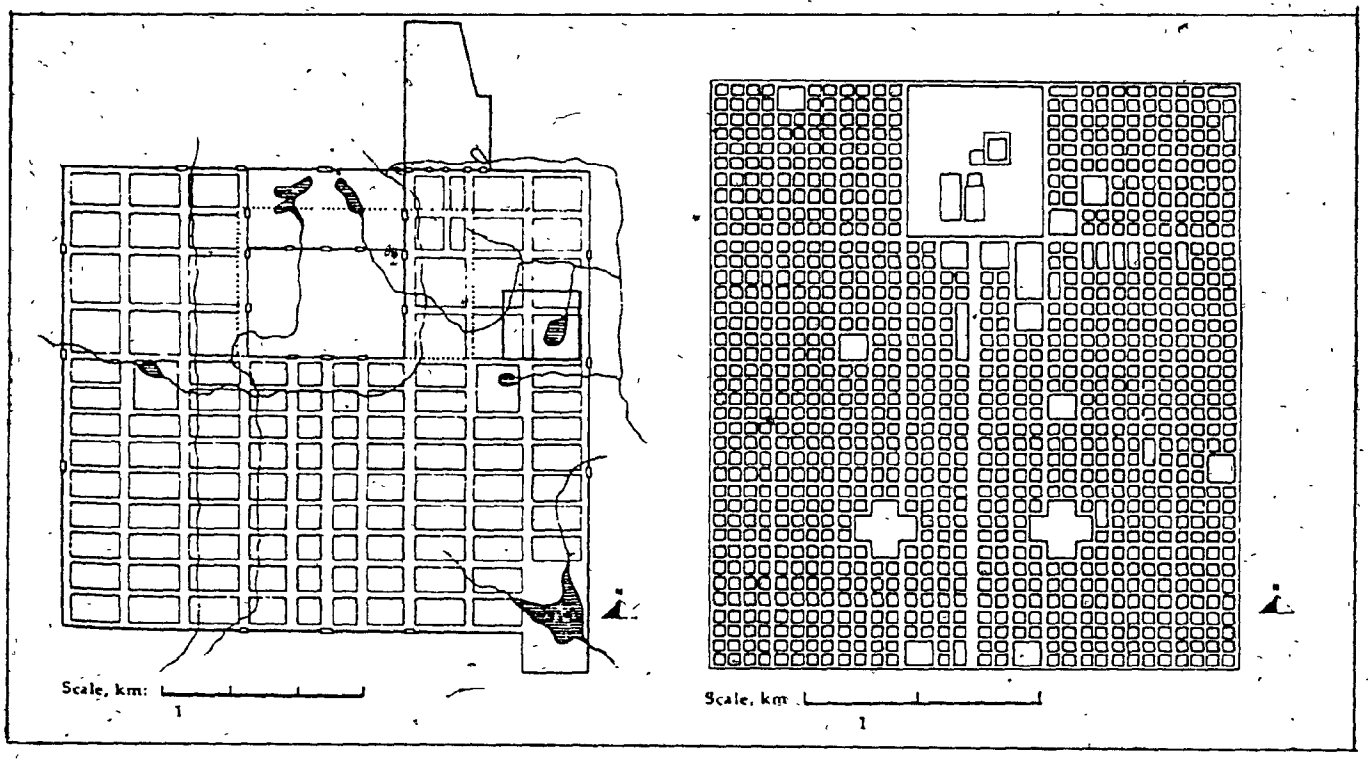


Fig. 52: Plan of Kyoto with the placement of the Temples

Source: Mitchell Bring and Josse Wayembergh, Japanes Gardens: Design and Meaning, p. 2.



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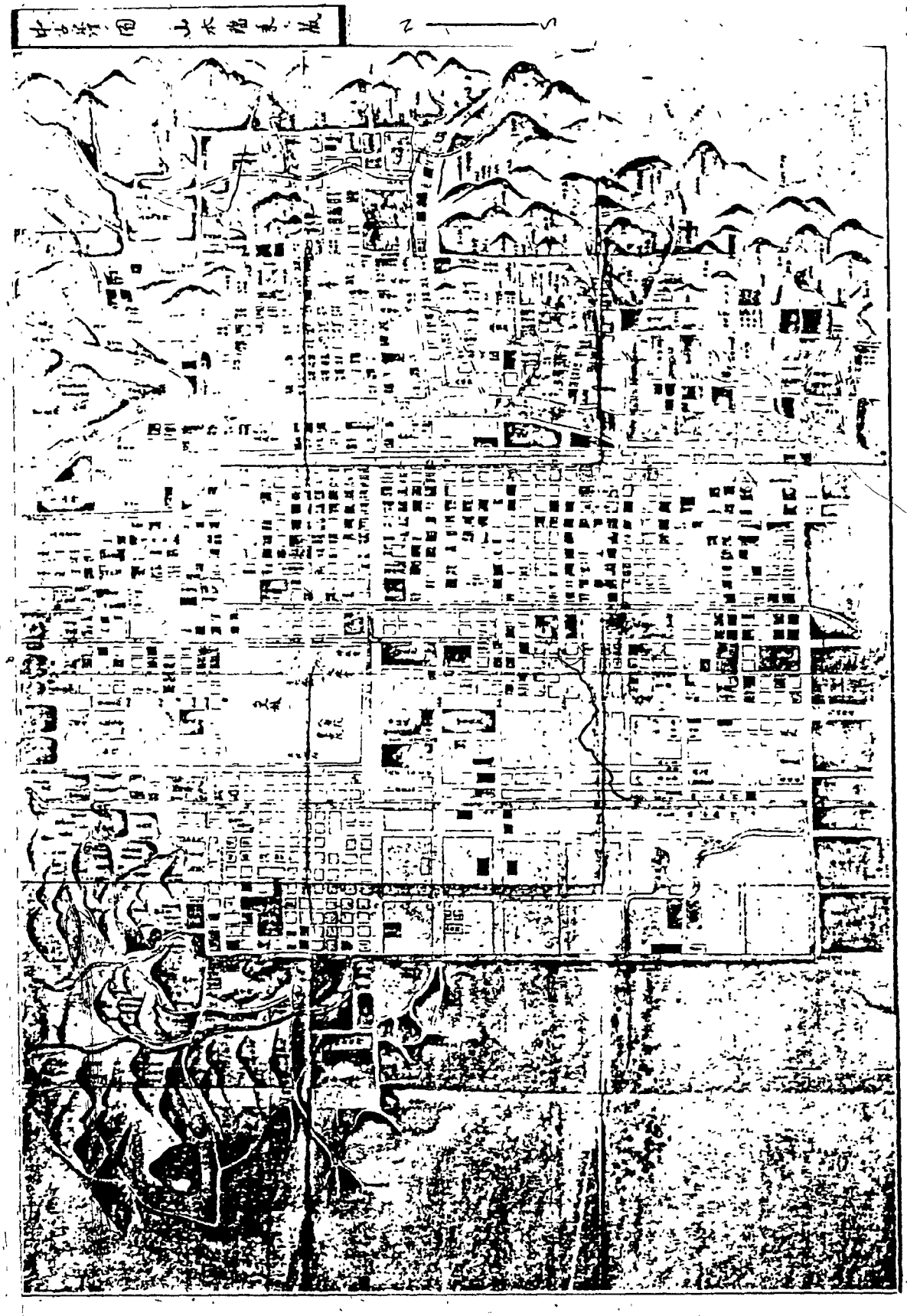
Source: Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning, p. 3.

Fig. 55: Kyoto in the Middle Ages.

Source: R. A. B. Ponsoby-Fane, Kyoto, Its History and Vicissitudes Since Its Foundation in 792 to 1868 (Hong Kong: Rumford Printing Press, 1931), pp. 124-125.



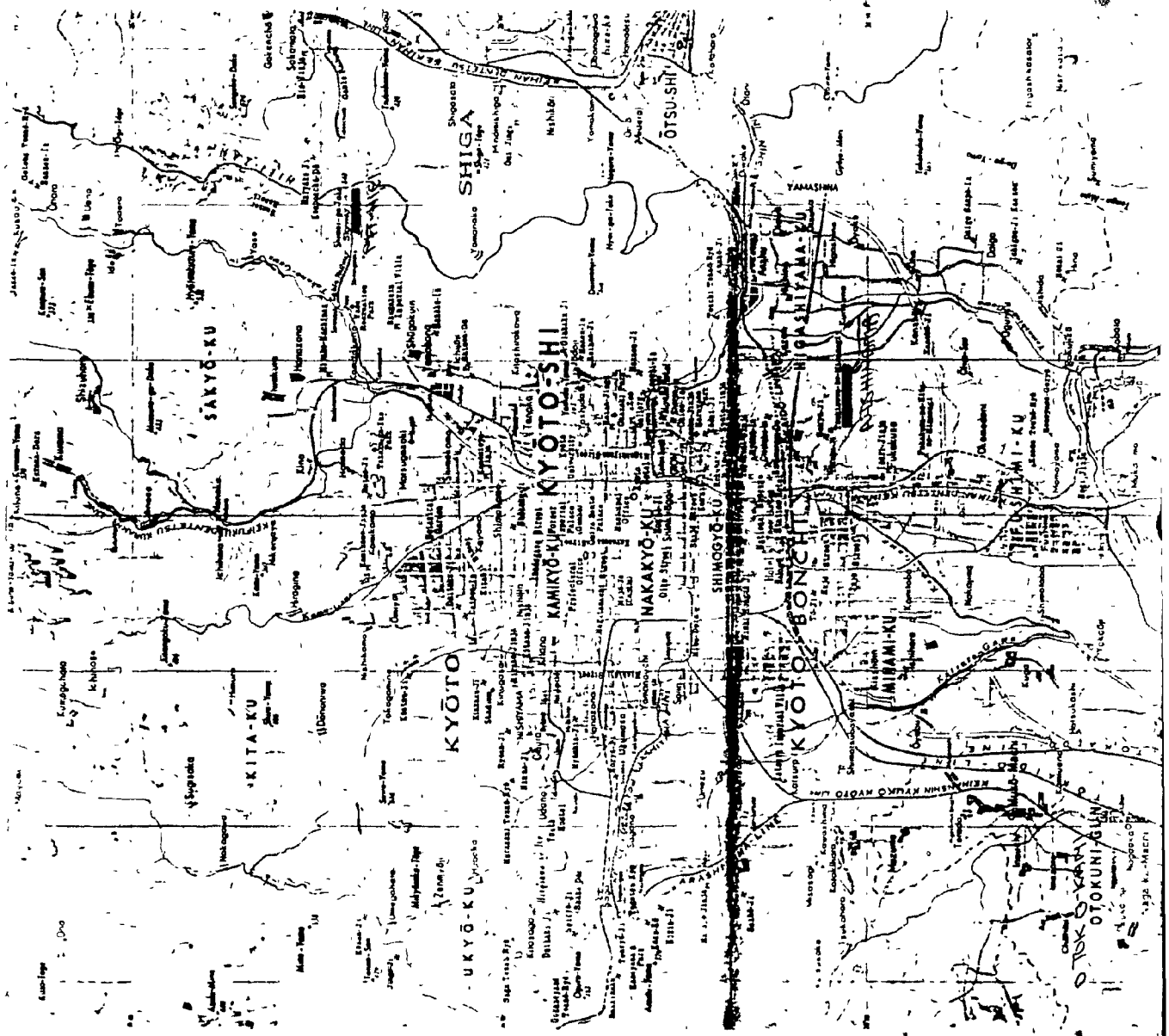
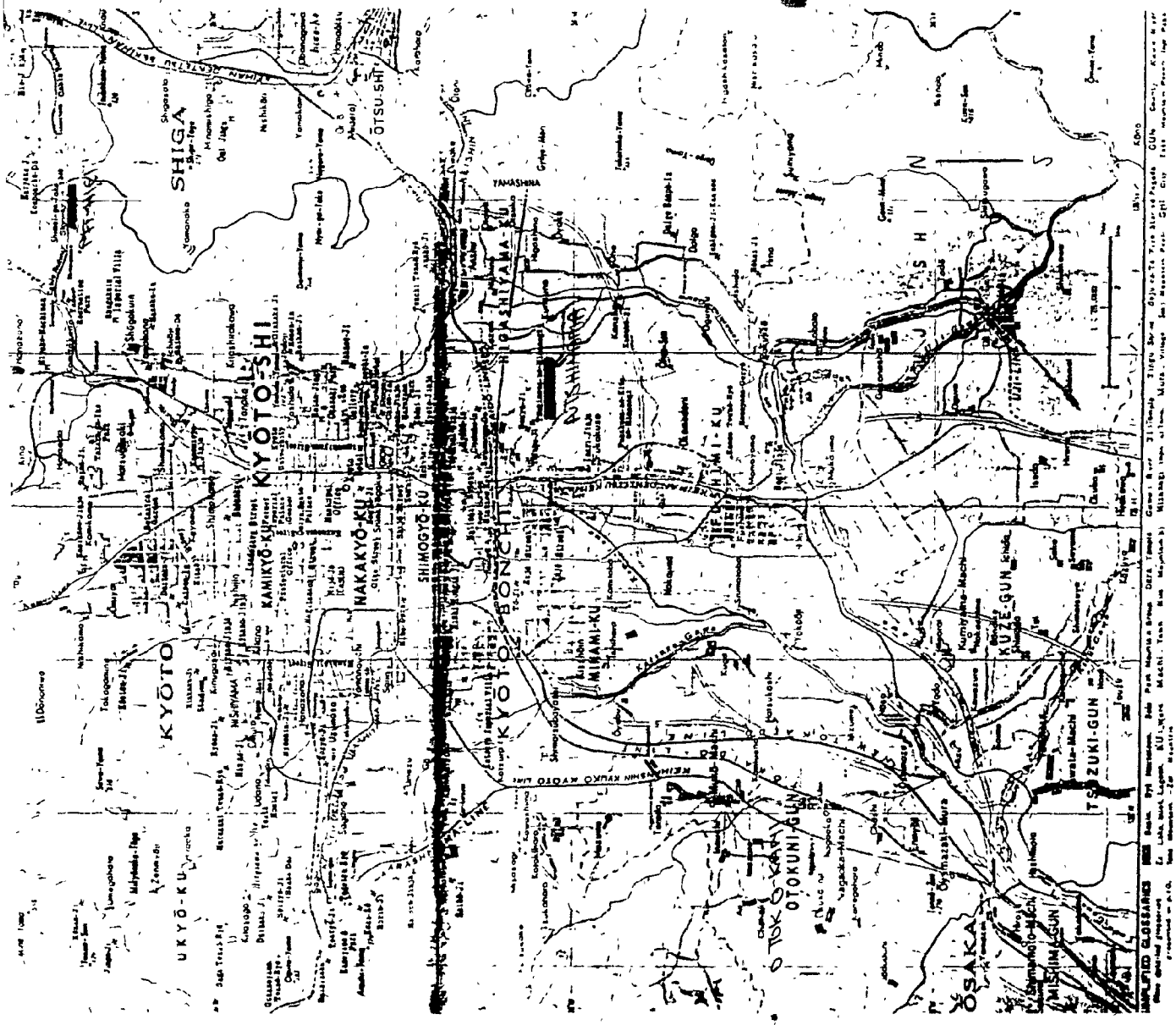


Fig. 56: Map of Present day Kyoto
Borrowed mountains and rings of shrines and temples marked.

Source: Teikoku's Compelte Atlas of Japan

Teikoku Shoin (Tokyo, Japan: Teikoku-Shoin Co. Ltd., 1969), pp. 37-38.



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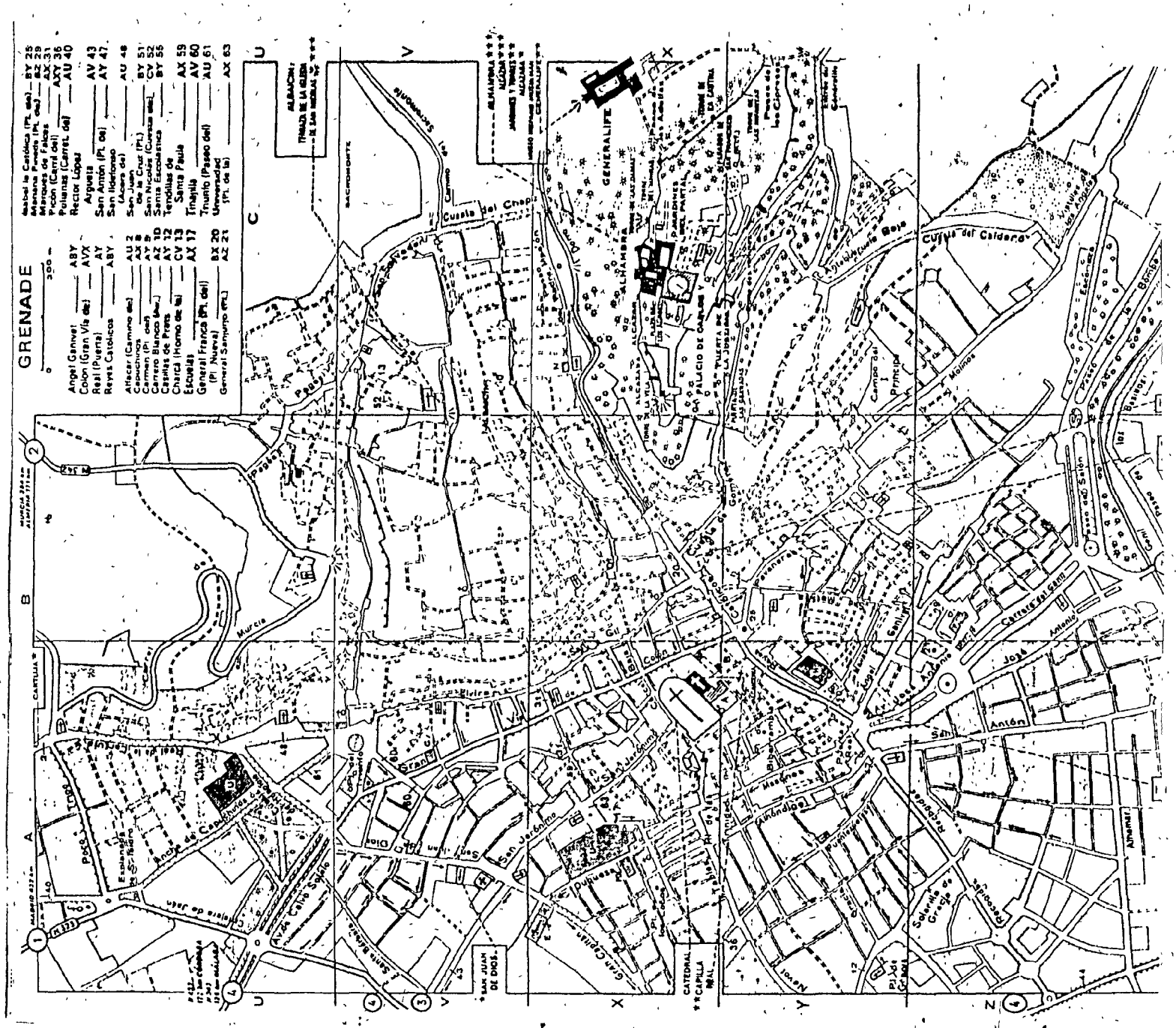

Fig. 57: Map of Present day Granada

Source: Michelin Espagne (Paris: Bussière Arts Graphiques, 1977), p. 46.

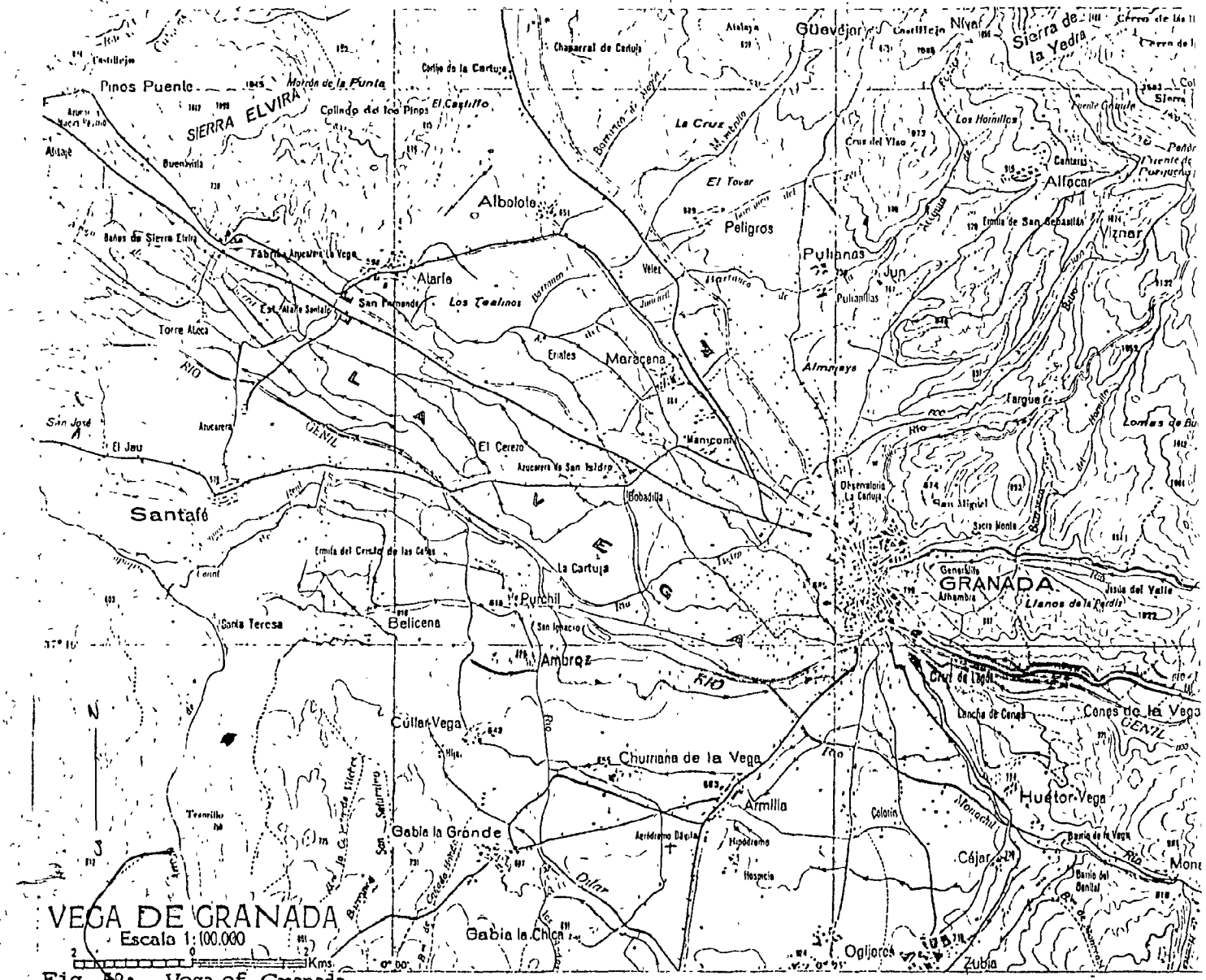

Fig. 58: Vega of Granada

Source: Atlas geografico de España
(Instituto Geografico y Catastral: Madrid, 1977)
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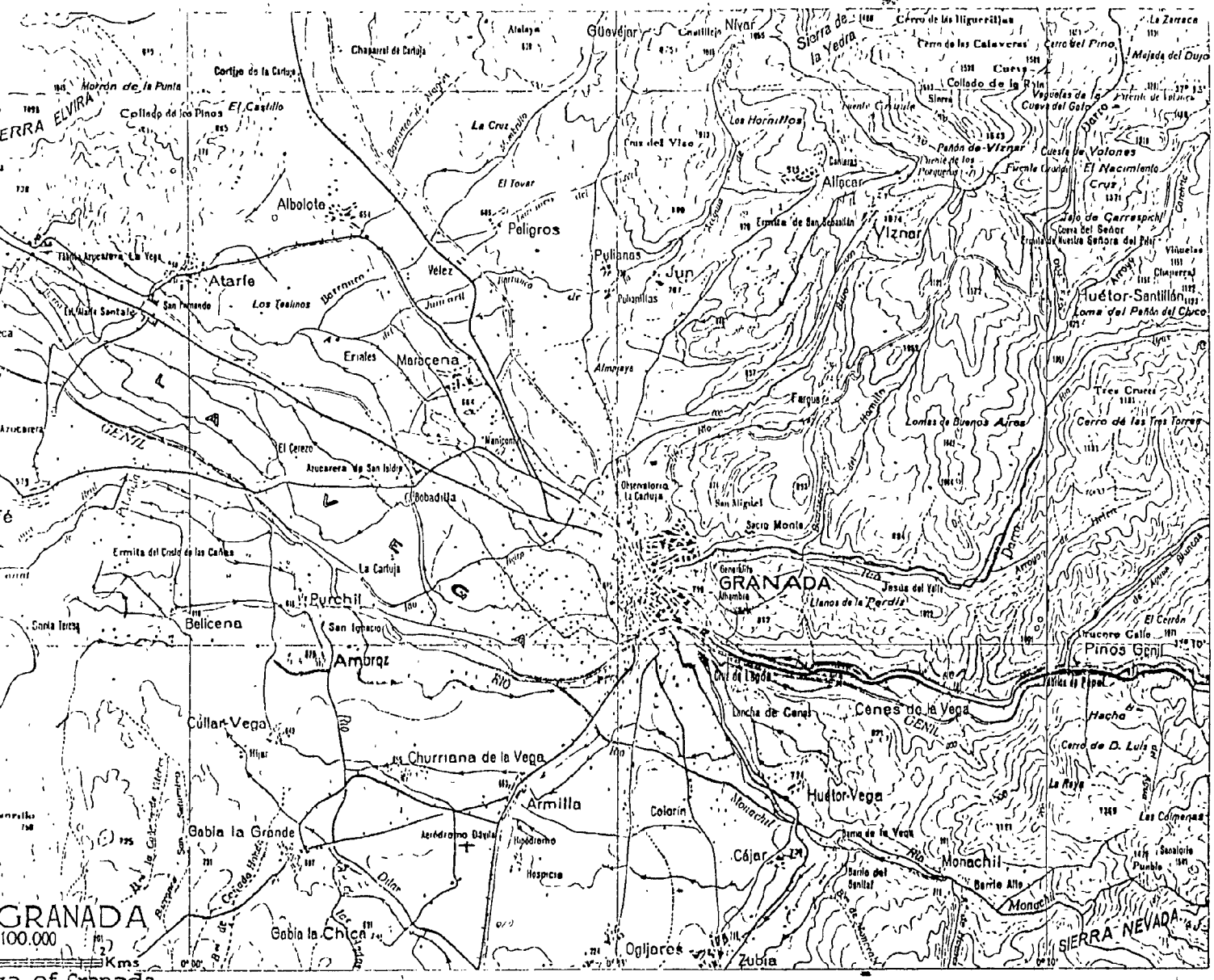

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CHAPTER I

INTRODUCTION

Double Authority in Two Garden Expressions, the Architectural and Landscape Gardens

A garden is not nature. A garden illustrates the effect of human[1] energy on the materials and forces of nature. A garden is an exercise in contradictions. It illustrates the supremacy of nature; no garden, however well constructed, no matter how well kept, can maintain the stasis of human design. Changes in light, temperature and rain provoke invisible changes in the cellular structure of the plants, which in turn provoke barely perceptible growth and movement. These small changes are constantly accumulating, producing new configurations in the garden. On a larger scale, winds, earthquakes, and changing water tables can alter or destroy a garden with the same finality as a conquering army. It is the aspect of change that renders the garden an exciting expression, because it creates a tension between natural and human forces.

The very existence of a garden is witness to the temporary supremacy of human design. To plot the garden, the gardener must delineate the site from land bearing agriculture or architecture or

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[1] I have chosen not to use or accept the words "man" or "mankind" as synonyms for "humanity." These are a manifestation of sexism. Likewise, I do not presume, or accept that others presume, that the gardener is always masculine, hence I use the model "her/his" or "he/she." What these compounds lose in brevity, they gain in clarity.

the natural landscape, thus deciding its place, form and extent. The site of the garden is prepared by human manipulation of natural materials: plants, water and rocks. All of these may be brought into play, or any of them may be eliminated. For each there is a wide range of manipulation. Plants may be presented in a natural formation in a natural habitat, or be transplanted, crossbred, trained into new configurations or integrated with artificial elements (gilded trees or blue hydrangeas). Gardens may incorporate existing water formations such as streams, lakes and ponds, or these may be artificially produced to appear natural, or to appear constructed (canals, pools, fountains and jets). The existing rock formations may be the point of departure, or rocks from another locale may be introduced. The gardener may present these rocks in their new setting as he/she found them, or they may be broken, cut or polished. The garden is constructed once the configurations of plant, water and rock elements have been coordinated with the site, but unlike most works of the visual arts, it requires enormous upkeep. Water supplies must be maintained, plants nurtured, plants trimmed, weeds eliminated and debris removed. Each of these activities requires choice. The conception of a garden goes beyond one gardener's design; most gardens are created by a number of gardeners, and certainly they are maintained constantly by new generations of gardeners. This raises the question: According to what plan is the garden created and maintained?

Certainly in terms of earthquakes and conquering armies there is little to be done, but faced with the constant and gentle powers of nature to change and the human power to perceive and adjust, the gardener has to produce a plan to aid subsequent gardeners as they face

the major and minor choices for maintenance.

Writers on gardens have proposed two approaches to the question of choice for the creation and maintenance of the garden. The one is to produce a simple, geometrical, and symmetrical plan.

> The mind of intellectual man, for instance, has always responded to the tranquility and assurance of certain geometrical forms such as the square and circle.[1]

The circle, square or any other simple two-dimensional form must sit on a plane, so the site is leveled. Of the construction elements in a garden, rocks and related materials, stones, bricks, ceramic tiles, concrete are less ephemeral than plants and water so these are used to define the plan with walls, walks, and contain plant and water elements with borders, parterres, plant tubs, canals, pools and fountains. They cannot guarantee the stasis of the design but they can restrict the range of changes. Although these gardens have been called formal or classical gardens, in this essay, I will use the term architectural gardens because it tells us something about the materials used for the plan, something about the approach for creating the plan and something about the goal of the plan which is a similar stability as found in architecture.[2]

The other choice for the gardener is to incorporate change into the design. The tangible and visible aspects of nature are the

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[1]Geoffrey and Suzanne Jellicoe, The Landscape of Man: Shaping the Environment From Prehistory to the Present Day (London: Thames and Hudson, 1975), p. 7.

[2]Although architecture is the direct organization of three-dimensional space, the term architectural garden refers to the imposition of a two-dimensional plan using architectural materials on three-dimensional space.

points of departure for this garden, they are studied, entered, assimilated and finally presented in the garden.

> Nature, in time, was handled as an art theme, the garden being subjected to the same laws of design, including rhythm, scale, harmonic balance, proportion, unity, and emphasis. Sometimes the garden treatment included abridgement, stylization and symbolism. But always in the garden layouts, man's handiwork remains subordinate to the theme of nature, this is exactly opposite to the Mediterranean pattern.[1]

A description of the aspects of this garden is similar to a description of most landscapes, asymmetrical, non-geometric with a flowing organization of space. This garden may be called a romantic garden, but in this essay I will refer to it as the landscape garden.

The differences between the architectural garden and the landscape garden represent a historical development in garden art. Giulio Argan,[2] traces the formation of the architectural garden from the kitchen garden (a small vegetable, fruit and herb garden). The utilitarian kitchen garden necessitated the specialization of plant species through cross-breeding, grafting and transplanting. The physical structures of the kitchen garden were based on such considerations as the availability of light, the distribution of water and the desire for an appearance of all-over abundance, hence the garden was divided into geometric sections of alternating rows of plants. The garden was protected by a wall or fence.

With increased wealth, the utilitarian aspects of the kitchen

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[1] Lorraine Kuck, The World of the Japanese Garden: From Chinese Origins to the Modern Landscape Garden (New York: Walter/Weatherhill, 1968), p. 68.

[2] Encyclopedia of World Art, 1959 ed., s.v. "Landscape Architecture," by Giulio Argan.

garden could be reduced or eliminated, thus the architectural garden made its appearance in the early civilization of Egypt, China and Mesapotamia. Argan mentions two interconnected aspects of the architectural garden, "It is known that in ancient times there was a direct relation between gardens and certain agrestral and domestic cults."[1] This, he says, is the basis of the terrestrial paradise myth.

> ... l'homme a aimé créer non loin du lui, par le dessin l'architecture ou tout autre moyen, un petit monde qui fut le réplique du grand, qui en reproduise tous les éléments, symboles et leçons qu'il contient. En outre à une action bénéfique sur ce microcosme correspond la même action sur le macrocosme. Celui-la est donc une manière, une des seules, d'agir sur celui-ci, d'infléchir sa marche pour le plus grand bien de l'homme.[2]

The other aspect is sociological; the garden was "associated with a further concept wherein its enjoyment was not vouchsafed to all men but was granted only to the educated and sensitive, an élite easily identified as the more cultured and wealthier social strata."[3] With variations, this was the main mode for gardens for centuries.

Although on an immediate visual level the landscape garden might appear to be the offspring of royal parks its basic proposal is different. A park is a tract of land set aside; sculptures, foundations, walls and walks may be added, but the human design elements and the natural elements remain separate and discrete. The landscape garden like the architectural garden attempts to coordinate the human and natural elements into a single design approach.

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[1]Ibid.

[2]Gerard Barrière, "L'emotion qui peut donner un arpent de terre quand on sait ce que signifie un jardin au Japon," Connaisance des Arts (Paris: Société d'Etudes et de Publications artistique, 1974), p. 63.

[3]Giulio Argan, op. cit.

The landscape garden as a distinct approach to garden making was developed in Japan during the fifteenth century, based on Chinese Taoist and Japanese Esoteric Buddhist gardens. These two garden types were mandalistic[1] which is to say that the elements in the garden were symbolic and served as a link between the microcosm and the macrocosm. The development of the landscape garden corresponded to the ascendancy of Zen Buddhist thought that rejected this mandalistic approach to design. Humanity was counselled to seek no farther than the natural elements of the environment for spiritual truths.

In Europe a parallel, even if different and later, development occurred. "The landscape garden was developed due to naturalism, characteristic of the age of Enlightenment together with a growing acquaintance of the Oriental landscape architecture." Argan continues: "Man was no longer trying to 'educate' nature according to the precepts of his own reason and sentiment, rather nature, which in its primeval state was assumed to possess inherently all values of beauty and goodness ... was now educating man."[2]

While one might argue that the differences between the architectural and landscape gardens is one of degrees of manipulation, I would like to propose that the deciding factor that distinguishes the two garden types is a difference in the gardener's view of the relationship of humanity to nature.

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[1]"The mandala is basically a representation of the universe, a consecrated area that serves as a receptacle for the gods and as a collection point of universal forces." The New Encyclopaedia Britannica, 1978 ed., s.v. Mandala.

[2]Ibid.

There are differences between the architectural gardens of Islam, Tao and Esoteric Buddhist, yet these were all attempts to link humanity to the cosmos.

Although there are differences between the landscape gardens in England (products of the Enlightenment and Romantic movements) and the landscape gardens of Japan (products of Zen Buddhism) they both are witnesses to attempts to integrate humanity to nature.

Where the architectural garden seeks a link to the cosmos (divine order), nature is seen as a raw material. Nature is certainly studied and examined to find order on a miniature or microscopic as proof of divine order and not as a source for a plan. The order in the architectural garden is born by the architectural elements, simple forms are created for simple religious truths. The authority for these forms or design is humanity. Humanity is separate from nature.

In the landscape garden, humanity seeks integration with nature, nature is the source and model. Nature is the constant for change in the garden and nature is the authority the gardener turns to.[1]

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[1] When I use the term 'natural authority', I use authority in the sense of, 'that to which, or one to whom, reference may be made in support of any fact, opinion, action, etc.'. The New Webster's Encyclopedia Dictionary of the English Language, 1971 ed., s.v. authority. In this sense nature or humanity as an authority is passive, they may be referred to by the gardener depending on her/his personal or cultural preference.

Generalife, An Expression of Human Authority

In order to examine the differences of landscape and architectural gardens, and the inherent contradictions in each, I have chosen two representative gardens. The gardens of the Generalife Palace,[1] and specifically those of the Patio of the Canal, will represent the architectural garden. The exact date of the construction of this small cruxiform garden in Granada is not clear, but Arab records indicate that it was already in construction and partially finished by 1319. It is enclosed by two loggias on the east and west sides and by two two-storied buildings on the north and south (see Figs. 3-6). At the junction of the two canals there was originally a kiosque. The water in the canals was still and constantly renewed by underwater pipes. The plant life in the garden comprised remarkably scented or coloured flowers, fruit trees, vegetables or herbs. The vegetation was set lower than the canals and paths. Although the garden is surrounded by a number of towers (miradors) that give a view over the Plains of Granada and onto the Alhambra and Albaicin, the garden is closed and interior in nature (see Figs. 15, 17, 20 and 21). "The house is a garden and the garden is a house. The garden is bounded and limited like a habitation with a blue ceiling"[2] (see Fig. 16). The garden had a private and a public entrance, one for the sultan and his family and

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[1]Generalife is a Spanish deformation of the Arab "Jinnah al-Arif," which is translated as "The Garden of the Architect" or "The Noblest of Gardens." Oleg Grabar, The Alhambra (Cambridge, Massachusetts: Harvard University Press, 1978), p. 209.

[2]Jesus Bermudez Pareja, "El Generalife despues del Incendio de 1958," Cuardernos de la Alhambra, Vol. 1 (Granada: Patronato de la Alhambra y Generalife, 1965), p. 11.

the other opening onto the city.

The present appearance of the Patio of the Canal is a Christian deformation of the original Islamic construction; in particular the plant and water elements were changed. The transversal canal was removed and water jets were introduced in the long canals. The kiosque was replaced by a fountain. The plant beds were raised and the present choice of plants does not reflect the utilitarian aspect of the Arab garden.

My choice of an Islamic garden to represent the architectural garden was based on its tradition of over two thousand years of the same basic plan. Starting with the royal Persian garden, the quatrapartite garden (a square of outside walls, cruxiform canals or walks, a polygon centre and circular pool or fountain) gathered in time, both religious and philosophical meaning.

Generalife is one of the few 'chehar bagh' (quatrapartite) gardens to have survived foreign and internal attacks on the palaces and gardens of the Islamic Empire. Generalife and his sister palace Alhambra were considered by contemporaneous Arab writers as two jewels in the crown of the empire.

Even the damage done to the gardens of Generalife is of interest. The damage to the water elements illustrates that the Christians understood and condemned the metaphor of the still pools of the garden as the pools of an Islamic paradise, thus a veritable testament to the intensity of the image. Having destroyed the offensive parts after the Reconquest, the Christians used the rubble as fill, which has been recovered by archeologists and has become a major source of information.

Entsu-ji, An Expression of Natural Authority

To represent the landscape garden, I have chosen Entsu-ji garden near the village of Hataeda, Japan.[1] This garden is also very small. It consists of forty-five moss-covered stones. These rocks were gathered from the sea and placed in irregular groupings broken up by clumps of bushes. A variety of bushes make up the low hedge that surrounds the garden on three sides. The mixture of species makes for a more 'natural' effect. This naturalness can be seen in the other plant elements; the tall Japanese cypress and cryptomeria behind the hedge and the bamboo grove behind the trees. The trunks of the trees are used to integrate the view of Mt. Hiei into the garden. This integration is called 'shakkei' and means, literally, capturing or borrowing a view. The fourth (west) side of the garden is bordered by the temple. It is from the viewing platform of the temple that the garden is to be appreciated; the viewer does not normally enter the garden.

Although water is not physically present in the form of streams, ponds or waterfalls, the placement of the rocks suggests the movement of the water (see Figs. 26-31). Entsu-ji has both a secular and religious tradition. The gardens were originally built as part of the villa of the retired Emperor Gomizuno-o in 1648. After changing hands, the villa was converted into a Buddhist temple in 1678. Although it was never completely private, entrance to the garden has always been,

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[1]The exact location of Entsu-ji is Hate-cho, Yamaishikura, Sakyo-ku Kyoto. Its full name is Daihizan Entsu-ji, "an abbreviation for one of the names of Kannon Bosatsu, patron goddess of mercy." Mitchell Bring and Josse Wayembergh, Japanese Gardens: Design and Meaning (New York: McGraw-Hill Company, 1981), p. 103.

and still is restricted to festival periods in the year.

My choice of a Japanese garden to represent the landscape garden is based on its long and rich tradition in that country. I reduced my choice to those that employed the 'shakkei' technique, as it illustrates a major concern of the landscape garden, that of the integration of the garden with the environment. Although numerous gardens employed this technique, with the passage of time, the majority lost the very view that originally stimulated their composition. Entsu-ji is one of the few that still effectively borrows distant scenery.

The other main reason for choosing Entsu-ji is that with the passage of time the stones, originally free of moss and lichen, now bear witness to the action of nature. As well, the trees have grown thicker and taller and have rendered the atmosphere of the garden more profound and serene. These changes illustrate the beauty of acceptance of nature's way in the landscape garden.

This essay will first consider the basic materials, limitations and possibilities of nature's authority, and consequently how these influence the gardener's awareness of space. Second, the religious messages embodied in the gardens will be examined. The rest of this essay will present a portrait of the two gardens and a comparison of the approaches of the landscape and architectural gardens to the concrete elements of garden design. Thus the use of rocks, plants and water will be discussed in both Entsu-ji and Generalife. The last two chapters will consider the relation of the connected buildings and the host cities to the gardens.

CHAPTER II

POSSIBILITIES AND LIMITATIONS OF NATURAL AUTHORITY, THE ENVIRONMENT

Entsu-ji

Climate, Vegetation and Topography

Japan is an archipelago dominated by three main islands; starting from approximately thirty degrees latitude they stretch a distance of about one thousand miles to forty-five degrees latitude. The widest lateral range is small, but the presence of a north-south mountain range makes for a radical weather change from east to west. There is, as well, a steady change from north to south. The land is basically humid with 1.5 metres of rainfall on the average. Tokyo which has an average climate for Japan has about two hundred and fifty days of sunny weather.

The scale of the land is small and varied. About one-eighth of the land is arable. Most of the people live on the plains, especially the Yamato Plain, where Kyoto is situated. This land is broken up by short, broad, swiftly running rivers. As the environment is broken up into hills and valleys with very few large plains, Gunter Mitschke suggests that the Japanese hesitated to develop any grandiose building schemes, as they would undoubtedly break the flow of nature.

> Lacking wide open spaces, and living close together as they do, the Japanese learned to make the most of small spaces. They were particularly ingenious in stretching visual space

> by exaggerating kinesthetic involvement. Not only are their gardens designed to be viewed with the eyes, but more than the usual number of muscular sensations are built into the experience of walking through a Japanese garden.[1]

The indigenous trees of Japan are oak, wild prune, wild vine, sumach, maple, birch and zelkov. Very early in the history of Japan other trees were introduced from China.

Kyoto, in terms of the rest of Japan, is cooler and wetter than the other major cities. The mountains that surround Kyoto produce a less temperate climate than that of coastal cities some thirty miles away. They lock in the damp cold during the winter and block out the cooling winds during the summer. The rivers that run down from them supply the city with its water source for ponds and garden rivers and waterfalls that diminish summer mugginess and heat. The mountains are also the source of vegetation for the gardens. The wet and cool climate caused by the surrounding mountains nurtures lush green vegetation, especially mosses. Mitchell Bring and Josse Wayembergh note that when the capital was transferred to Tokyo, the attempts to produce moss gardens were dismal failures, because of the drier climate there.

Entsu-ji is part of the second ring of Buddhist temples that surround Kyoto.[2] The site of Entsu-ji, like the site of other temples and imperial villas was originally occupied by villas of a wealthy court official and was built as a refuge from the city heat. In the case of Entsu-ji, it was donated to the Emperor Gomizumo-o'. There he constructed a tea house that was called Hataeda Palace. Later the

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[1] Edward T. Hall, The Hidden Dimension (Garden City, New York: Doubleday and Company, Inc., 1969), p. 51. Entsu-ji, like some other Zen gardens, is an exception to this rule. Only the circuitous walk up to the garden corresponds to Hall's description, the garden proper cannot be entered.

[2] See Figure 56.

emperor Reigen converted the tea house into a Buddhist nunnery for his foster mother, Enko-in.[1]

Space Awareness

Before dealing with the Japanese garden's relationship to its site, it is necessary to explore the Japanese sense of space. Although the Islamic sensibility is different from that of the European or American, at least the terms are the same. In the Japanese context, space has a much different meaning. In the West, space is the obverse of a tangible object. A box from the outside is an object and from the inside is space. This mechanical and descriptive view is supported by physics and mathematics, two disciplines that did not exist as such in Japan. The meaning of space as suggested by Gunter Nitschke is closer to 'place'; it is a space continuum that includes the space around the skin and the inside. In other words, all that is involved is something being there. In that sense it is infinite, as it can continue on and on. This experiential space is called "Ma."[2] Nitschke defines three stages of spatial awareness that existed in the roots of Japanese aesthetics and they continue to exist: apparent disorder, geometric order and sophisticated order.

Apparent disorder, where nature is the basis of all order and organization, is dictated by the formation of such things as waterfalls, riverbeds and ravines. This respect for natural formation has its roots in the same Shinto animism that explains the importance of

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[1]This may partly explain the lightness of the design of the garden. More rocks, bushes and trees softened the garden design, and consequently made it easier to allow moss to overgrow the rocks.

[2]Gunther Nitschke, "Ma: The Japanese Sense of Place," Architectural Design, Vol. 36 (March 1966), pp. 116-156 passim.

stones and rocks. This is in direct contrast to the Islamic attitude towards site, which, although acutely aware of the potential of a hill or ravine, would adjust and mold the landscape so that the garden would be broken into terraces, where each is a leveled plot.

The orders of houses and towns of the Jomon and Yayoi periods (early historical periods) are examples of apparent disorder. This town planning was called 'arare' which means haphazard or fortuitous. The Japanese associated the random placement of homes on the Yamato Plain with fallen leaves, 'rakka', scattered beach shells, 'iso-gai' or scattered beans, 'mama-maki'.[1] It is important to remember that there is a distance constant between these homes, despite the apparent disorder.

The next order is geometric order. It can be seen best in the Japanese capital cities. The pyramid social and political structure, with the landless river people and peasant farmers as the base, the merchants, samurai and nobles resting on this, and finally the Emperor as god at the top, corresponds to the journey to the centre of the city. Thus the landless people and farmers lived outside the city limits, the merchants were restricted to the eastern and western extremities, and the homes of the nobles surrounded the centre of the city, the imperial palaces. Within the imperial compound there existed a similar hierarchy of rings of accessibility to the emperor. Based on the Chinese model, these cities were a conscious reflection of the cosmic order. The microcosm, by imitating the macrocosm, could then be acted upon to change the greater sphere. As well, if the city could effectively duplicate the celestial order, it would

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[1] Nitschke, "Ma, the Japanese Sense of Place," p. 117.

then, by association, run on the same power source. The throne was then related to the central mountain, "the immobile pivot."

The last order is sophisticated order. It transcends the geometric order which is a plan for a static and two-dimensional world. The basic tools of this order are growth and change. The understanding of geometry and the intuition of nature's workings are augmented by the understanding of nature's principles. The Japanese designer and the Japanese viewer keep an image of geometric order in their heads while allowing growth and change, move creation and perception, to forms that resemble unsophisticated order.

'Shin', 'Gyo' and 'So'

Sophisticated order recognises the geometric and symmetrical elements in the growth patterns of nature and moves from there by intuition to greater freedom. This development is centred on the degrees of formalism: 'shin', 'gyo' and 'so'. In 'shin', all elements are visible and the work is complete. All the interior elements are very delicately balanced, and there are no wild or dramatic spaces or movements. 'Gyo' and 'so' can only be seen within the framing device of 'shin'. When the Sakutei-ki,[1] a twelfth century treatise on gardening, reminds the viewer of the ancient rules, it is

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[1] Aujourd'hui, souvent l'évocation du jardin japonais parait liée aux créations des moines Zen, mais par la lecture approfondie du Sakutei ki, l'on découvre que c'est plutôt par la création de jardins suivant ces préceptes anciens que le Zen a trouvé au Japon l'un de ses meilleurs moyens d'expression. Sakutei-ki, a book of secrets for the construction of gardens is the oldest complete volume on garden design, written during the end of the twelfth century by Yoshitsune Gokyohoko, who reworked certain elements of an earlier volume of 1040 by Yoshitsuma Tachibana. Pierre Rambach and Suzanne Rambach, Sakutei-ki au le Livre secret des Jardins Japonais (Geneva: Albert Skira, 1973), p. 15.

referring to 'shin'. 'Gyo' is less balanced and often more symbolic; objects or voids can sit in for elements that are not in the design. 'So' is called 'bold freedom' or 'unrestrained freedom', two names that should not be taken too literally in Western terms.

The 'so' garden must recall the pattern of the 'shin' garden, at least in the viewer's mind. It is a cat and mouse game for contemplation: not pushed enough, there is no material for the exercise and pushed too far, it is rendered meaningless. The examples of sophisticated order,

> do not completely exclude geometry; they build upon it, use it when appropriate, transcend it when no longer adequate. This leads to a sense of beauty dependent on accident and incompleteness as found in nature. There is no longer an obvious unity of form, but a unity of attitude that makes certain categories of humanly conceived dynamic and changing structures, analogous to those visible in nature.[1]

The Landscape and Its Presentation in Painting and Gardens

Before specifically discussing Entsu-ji and its relationship to its site, the concepts of landscape painting must be introduced and situated, in terms of landscape design.

Much of Zen Buddhist philosophy concerning landscape design originated in the aesthetics of the sumi painting. These paintings were simple black and white ink drawings that bore a great calligraphic content. The emphasis was as much on the form drawn as the space that surrounded it. If that space was not in its entirety activated, then the painting had failed. Like scroll painting, sumi painting was not an attempt to describe a whole landscape or

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[1] Neitschke, "Ma: The Japanese Sense of Place," p. 131.

event,[1] cloudy parts were placed between the objects not to give a sense of something hidden, but to balance form and non-form. This technique, called 'un-en', clouds and smoke, was a poetic evocation of space. The importance lies in the feelings that rise up in the viewer. It is important to keep seeing the void, not as a lack in the garden or painting, but an integral part of a whole, where form interrelated to non-form becomes the arena for flux and transformation.

Sumi painting is important in that it introduced the void as an integral part of design in the 'gyo' and 'so' levels of visual organization. As well, sumi painting began to present the problems related to the connection of the foreground and the background. Zen garden design like sumi painting holds a balance between reproduction of the landscape and the use of void to evoke the essence of the surrounding nature. What to present, and what not to present of the actual landscape, is the basic concern of borrowed scenery.

The technique of borrowed scenery began in the Muromachi period (sixteenth century) and was thoroughly developed by the end of the seventeenth century. Masao Hayakawa suggests that the Japanese were influenced by a Chinese book called Yuan-yeh by Li Chi-cheng, in which four techniques are discussed: borrowing distant scenery, nearby scenery, and borrowing from high and from low.[2] It is

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[1]Alan Watts suggests that sumi painting is an attempt to portray realistically a landscape, that Japan is a country of rolling sea fogs and mists rising up from the valleys which are locked in by the mountains, so that the landscape is literally full of voids. The Way of Zen (New York: Vintage Books, 1957), pp. 178-179.

[2]Masao Hayakawa, The Garden Art of Japan (New York: Weatherhill/Heibonsha, 1973), p. 140.

important to point out that the Chinese had more in common with the Islamic cultures than they did with Japan in their choice of scenery and approach to nature. Their tastes leaned unquestionably to the exotic and picturesque, and the ideas contained in the book are mainly concerned with rendering most dramatic any particular view. It is somewhat doubtful how important this book really was to the development of Japanese gardens; certainly, though, it provided the Japanese with a vocabulary.

Borrowed Scenery: 'Shakkei'

'Shakkei' or borrowed scenery is concerned with 'ikedouri' capturing 'alive' a landscape, where there are 'distant views incorporated into the garden setting'.[1]

There are, according to Teiji Itoh, four essentials to constitute a 'shakkei' garden. "The first of these essentials is that the garden be within the premises of a building or a complex of buildings."[2] A completely enclosed 'shakkei' garden is rather unlikely, though. Any garden style may use the 'shakkei' technique, those that depend on a single point of view and a static viewer, and those that are called strolling gardens. The one garden type that would never use the 'shakkei' technique is a tea garden, mainly because shakkei draws the viewer out of the immediate surroundings and away from the intense concentration of the actual garden and the ritual to which they are assisting. It is the architectural element that makes the view more than just a view.

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[1]Teiji Itoh, Space and Illusion in the Japanese Garden (New York: Weatherhill/Tankosha, 1973), p. 15.

[2]Ibid., p. 29.

The buildings provide a philosophical setting for contemplation.

The second essential is that the scenery to be captured, must be worthy and stable. Mountains (Mt. Hiei, the Higashiyama range, Nishiyama and Otokoyama for the gardens of Kyoto,[1] and Mt. Edo for those of Tokyo); the Yamato Plain; marine landscapes; or permanent man-made objects, such as imperial tombs; all are subjects that last.

The third essential is choosing what to show and what to reject by trimming the view. This trimming is called 'mikiri'. The usual devices are a thick hedge or a clay wall trimmed with tiles on the top. A hedge will blend well into the general landscape; it is usually planted with several different types of bushes. Entsu-ji, for example, has a trimming hedge that is made up of camellia, sasanqua, tea bush, gardenia, oak and Chinese hawthorn.

> If a hedge is made up of only one species of plant, it tends to attract the viewer's eye and at the same time distract him from the distant scenery beyond it. Mixed plantings on the other hand, have the suitably vague and unobtrusive character, and this is no doubt the reason why they have been traditionally used.[2]

The fourth essential is a capturing device, serving to bring in the borrowed scenery. It is this device that will open the garden to a wide scale of depth and spaciousness. The capturing device can be a natural element such as tree trunks, a wood, the sky or a man-made object or objects: posts and eaves, a stone lantern, or a window.

The most common form of 'shakkei' is 'borrowing' through tree trunks. This is the method used in Entsu-ji. Only trees that have high lower branches, or trees that can be trimmed, can be used to capture

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[1] See Figure 52.

[2] Ibid.

scenery. Another criterion is that they have fairly straight trunks so that they do not overexcite the view (see Figs. 42, 35 and 36). These trees must also have beautifully textured bark. An excellent tree is the red pine; if a greater emphasis is needed on the intermediary ground, then the more textured black pine can be used.

In the case of Entsu-ji, cryptomeria are used; a few trees are placed before the hedge and the greatest part are behind it; thus, the transition is gradual. These trees have their bottom branches trimmed. When the garden was first built the trees were obviously not as high and consequently did not cast as heavy or as large a shade as they presently do. Irmtraud Schaarschmidt-Richter explains the effect of the mixed planting on the physical sensations of the viewer:

> Designs conceived to include landscape backgrounds ('shakkei') are of course particularly well suited to 'shoin' gardens, gardens for contemplation .... In these gardens the spectator's eye prepared by the unobtrusiveness of the composition is drawn on the scenery that is included, borrowed for the garden.[1]

The visual continuum of the view (see Fig. 34) from the foreground to the trimming device, to the capturing device, to the captured or borrowed scenery, reflects a philosophical stance concerning humanity and nature.

> The experience of these quietly flowing spaces suggesting that man saw himself and his creations as a normal extension of nature, as a part of it, not in fear of and resisting its forces, or enclosing himself to gain an illusory sense of security, but in harmony with them, thus opening himself more and more, becoming one with nature's forms and spaces to a degree of being able to convey to us, in his own forms and spaces, the practical non-existence of the distinction between inner and outer space. After all where is the inside or outside of nature?[2]

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[1] Irmtraud Schaarschmidt-Richter, Japanese Gardens (New York: William Morrow & Company, Inc., 1979), p. 194.

[2] Nitschke, "Ma: The Japanese Sense of Place," p. 133.

Generalife

Climate, Vegetation, and Topography

Andalusia is a broad north-based triangle that is cut off from the rest of Spain by the Sierra Nevada Mountains. The capital of the old Islamic kingdom is Granada which sits on 37° latitude. It is very close to the latitude of Kyoto which is 35°. The climate of Andalusia is more north African-Mediterranean in contrast to the rest of Spain, which experiences a continental climate. Like most Mediterranean climates, the rain falls in the winter. The rainfall is almost half of that of Kyoto ranging between half a metre and a metre. The climate of Andalusia was described in the fourteenth chapter of Maslik, a geographical and historical text on the Arab Empire written in 1337 as follows:

> The Kingdom of Andalusia (That Allah most high will preserve!) stretches ten days journeys worth on its length and three days on its width .... Granada is the present capital of the kingdom and the most noteworthy city of the country. It is a large city in a circular form made charming by the trees, rains, running waters and gardens, where they abound; it is only somewhat exposed to the winds which come only rarely for the city is surrounded by mountains. Its waters have their source in two important rivers, the Xenil and the Darro. The Xenil runs down from Mont Soleir in the south of the city. The mount is very high and is snow-capped in summer and winter and thus the water is very cold. Consequently Granada is very cold being only ten miles from the mountain. Ibn Sadra said about the cold of Granada, 'We are permitted to forget our prayers and to drink wine, something otherwise forbidden so that we can seek refuge in the fires of hell, as it would be sweeter and gentler to suffer than the cold of the Soleir.[1]

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[1] Ibn Fadl Allah Al-Umari, Masilik El Absar, L'Afrique, Moins L'Egypte, Vol. 1, trans. Gaudefroy-Demembynes (Paris: Libraire Orientaliste Paul Geuthner, 1927), p. 22.

Space Awareness

Strategic Location

Francisco Prieto-Moreno[1] explains that the particular historical characteristics of the region of Granada come from its geographical location. Open to the south, it is in contact with the Mediterranean world, and the Arab world of northern Africa and the Middle East. To the north lies the formidable barrier of the Sierra Nevada. Thus for almost a thousand years, the plains of Granada offered the Arabs security, peace and wealth based on agriculture which, itself, was based on an adequate water supply. This secure position allowed the Arabs a closer contact with the Christian north and the more fanatically devout Africa. The final result of this security and peace was a radical change in the Arab culture, to which the buildings and gardens were witnesses.

It is interesting to see Arab Spain in the greater context of the whole Islamic Empire. Geoffrey and Suzanne Jellicoe point out that the extent of the Arab influence was limited to approximately 40° latitude. They suggest that this line is as much climatic as it is strategic. The Arab political, social and religious structures were based on an environment consisting of highly-concentrated urban centres and sparsely-populated surrounding areas, as was found in the desert and semi-desert of the Near East. Although the Arab Empire did expand beyond this line it was never for any great period of time.

When the first Arab and Berber invaders arrived they found that

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[1]Francisco Prieto-Moreno, Los Jardines de Granada (Madrid: Editorial Ciguena, 1952), p. 9.

a large part of the Roman aqueducts, canals and ditches were still intact or at least easily reparable. Although Arab engineering was not greatly advanced, they respected, repaired and eventually expanded the system. This is in contrast to their neighbours to the north who destroyed most Roman constructions. The presence of a large number of water sources and an irrigation system to increase their effect distinguishes Andalusia from most of northern Africa.

Having just described the quality of the Andalusian landscape, it may appear contradictory to then state that the builders of the Alhambra and Generalife constructed them as a refuge from a hostile environment.

To resolve this apparent contradiction, it is important to realize that these people, with their heritage of thousands of years in the desert, did not so rapidly adapt to their new environment. By narrowing James Dickie's definition of Oriental to that of the Near and Middle East, we can accept his statement that:

> The Arab love of gardens stems from the fear and antipathy which the Oriental has always felt for nature in its hostile aspect of the desert, which signifies for him death, aridity and the resort of ogres and evil spirits.[1]

To consider the influence of the Andalusian environment in general and the site of Alhambra and Generalife specifically, a reference to Paul Wheatley's six levels of Arab space perception is pertinent.[2]

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[1] James Dickie, "The Islamic Garden in Spain," The Islamic Garden (Washington: Dunbarton Oaks, Trustees for Harvard University, 1976), p. 90.

[2] Paul Wheatley, "Levels of Space Awareness in the Traditional Islamic City," Ekistics 253 (Dec. 1976), p. 354.

"In general they may be said to incorporate three sets of components, namely universal elementary structures (or archetypes), which exhibit a certain degree of invariance, socially or culturally conditioned structures, and finally, some personal idiosyncrasies."[1]

The first level of space awareness is the earth's surface and its atmosphere, i.e. earth, sky and water (he excludes heaven from this category). The second division is the subdivisions of the earth, that unit to which each person feels he/she belongs. These two space divisions come out of humanity's relationship to the environment. The following two divisions come from inter-human relationships; they are in the broadest level, the urban unit and its transitional divisions, and on the narrowest level, the house. The home compound is private domain and thus implies the highest level of territoriality. The last two categories are based on the body's relationship to objects. The first is the level of furniture and the second is of utensils, both are determined by the body's parts and their movement.

If the connection of the Zen garden to its surroundings is a cat and mouse movement to the outside, the connection of the Islamic garden to its environment is a steady and direct movement to the centre. Even as the viewer leaves the centre of the garden through the other levels to the outside, he/she is always aware of the centre as a point of departure.

Levels of Space Perception

In terms of the first level of space-awareness, the Islamic gardener still viewed the sky as a hostile element, disconnected to

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[1]Ibid., p. 356.

existence here on earth. The sky transmits the heat of the sun but as well holds the relief of rain.

> In the desert the sky had predominated, eventually symbolized on earth by the dome. In Spain the sky was less significant because the more fertile and well-treed environment drew attention from the force and majesty of the heavens .... Attracted rather than repelled by the environment, internal courts now began to expand in imagination beyond the enclosing walls.[1]

Unlike most Islamic gardens the Patio of the Canal was flanked by unenclosed gardens that were in turn divided by hedges from fruit and vegetable gardens (see Fig. 2). It was completely separate from them and they were not visible. This expansive plan was specific to Islamic Spain and probably is due to the steady water supply from the aqueducts, the higher rainfall and the lower temperature of Andalusia.

The functioning of the gardens and buildings of Generalife on the first and second levels of awareness are connected to the mirador (a lookout tower and viewing platform). The picturesque spatial awareness of the plain of Granada held like a bowl in the hands of the mountains is clearly evident in the construction of the mirador, which was entered from a closed and isolated garden by traversing an open arched gallery and then passing through the first viewing platform directly, or by climbing a set of stairs to yet another level where the mirador faces the open plains of Granada. This second view is in no way related to the garden and the viewer is aware more of the abruptness of the transition than of any sort of interconnectives.

On the third level of space awareness, which is the urban level, Generalife is tied to the city on a visual and audial level. The same

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[1]Jellicoe and Jellicoe, The Landscape of Man, p. 41.

mirador that opens over the plains of Granada also gives a view over the city. As already mentioned, the sounds of the city, the call to prayer from the mosque, the sounds of the army entering the city, and the general hum of the market are reflected into the garden.

It is significant that the word used by Marie Luise Gothein to describe the views of the garden, city or plains from the mirador is "picturesque."[1] The choice of the word is indicative of the emphasis of the framing device. The picture plane aspect of the view inhibits the viewer from entering the surrounding nature. Originally there were three miradors that faced out from the garden: one that faced over the city (see Fig. 15), one that faced the Alhambra (see Fig. 12), and one that was encumbered by later construction that faced onto the hillside (see Fig. 20). Especially from the northern Mirador, which looks over the city, one is most aware of the precipice perched nervously over terra firma. The view is picture postcard quality. This is because there is no middle ground to link the fore and background which is in direct contrast to the flowing movement in the 'shakkei' garden. Thus the Plains of Granada and the Sierra Nevada seem out of scale and seem very distant.

> In sight of the Alhambra, and nearly in sight of the Christian border (it wouldn't have been possible to ignore), close to the central kiosque in the closed Persian garden, the look-out over the landscape, that offers us on the west the most faithful evocation of the exquisite rural Generalife of the Middle Ages, not only through the view of the urban clusters with a medieval flavour like the Alhambra and the Albaicin, nowadays almost completely hidden by new buildings in Granada but also by being side by side with vegetable

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[1]Marie Luise Gothein, A History of Garden Art: From Early Times to the Present, Vol. 1 (New York: Hacker Art Books, 1966), p. 156.

> gardens and orchards which provide a foreground, without resorting to the embellishments of modern gardens, roads and tourist attractions.[1]

Wheatley's fourth level of awareness of space is that of the building. It is interesting to note the relationship of buildings to the site. The garden is integrated into the hillside by terracing, thus each individual unit is like a fresh piece of paper ready to be drawn upon, yet not alone; they are bound by interlocking walls and passages. It is possible to extend the scope of the unit to include the Alhambra, to make one statement that stretches across both hills. In this context, the two palaces dominate the two hills, and between them they represent winter and summer, wealth and power on one side, and leisure and beauty on the other. One palace is entered from the city giving access to the courts or jails, and the other is entered to relax during the afternoon; the first is the Alhambra and the second is Generalife (see Fig. 2).

> The many royal possessions of the Granada Islamic Kings enabled them to maintain their inherited rural estates -- lands and buildings -- with full comforts so they could use them and enjoy them as leisure residence, and welcome important visitors to Granada, or to complacently watch over them when it was convenient for plowing or harvesting, or simply to practice, in a way, the nomadic customs that Islam had spread, often echoed in the simple pastime of moving from one place to another, for the sheer pleasure of it, or in strategical flights.[2]

On the furniture level there are two constructions to consider, the Water Staircase and the kiosque. Although these are both architectural elements in terms of scale, they are closer to furniture in their relationship to the human body. The Water Staircase leads up from the Patio of the Canal to the Patio of the Cypress of the

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[1]Pareja, "El Generalife despues del incendio de 1958," p. 29.

[2]Ibid., p. 12.

Sultanas: Climbing the staircase, the viewer is touched by a number of stimuli, probably the most noticeable is the sound of water running down the hollowed out handrails. The water is not visible though, arched tiles cover the rivulets. It is only at the landing that one sees in the bowl-shaped node, a tiny whirlpool of water (see Figs. 13 and 14). At these landings were originally little jets of water (see Fig. 12). Apparently water jets once shot out from under the steps to surprise unsuspecting visitors. On a more subtle level, the visitor can feel the cold sweat of the water as it seeps through the low fired tiles covering the handrails. The laurel trees that shade the Water Staircase now, correspond to ancient descriptions where they were praised for their beautiful shade and scent.

The kiosque also functions on the furniture level; although an architectural construction the benches in it allowed a relaxed appreciation of the garden. The kiosque was destroyed by the Christians, but following written descriptions and with some North African models, it is possible to reconstruct its form. It was probably octagonal, with open walls and a small truncated dome. It was the centre of the garden and so contained the conceptual centre point for the design. Once seated inside, the visitor was at once in command of the whole garden, with a view of the galleries and the miradors. It afforded the same kind of security that a corner does. One could not be approached unnoticed and one's conversation could not be heard outside the kiosque.

On the utensil level, there is only the human hand. Contact between the hand and the garden was probably limited. Generalife did not incorporate materials that were chosen for their tactile qualities.

The most seductively tactile element within the garden was most

probably the four still pools. It is a basic human instinct to touch in order to verify if the water is really water, and it is also a basic desire to make one's own imprint of radiating rings of waves. But was it likely that one would touch the pools, other than surreptitiously? Although there are Arab poems and stories recounting kings striking pools and pulling out gold and jewels, or Solomon striking his huge pool of mercury, it is likely that these acts would have been more in keeping with the character of Generalife's sister garden, the Court of the Lion, in Alhambra. Similarly the washing of hands before prayers may have been done in the pools but it seems unlikely to me considering their religious meaning. Other than touching the still surface of the water in the pools, the visitor may have touched the blossoms of fragrant flowers or beautiful blossoms. For the Islamic viewer, the infinity of the patterns of the flower opens up again to the world universe on a mystical and conceptual level. Connecting the macroscopic scale of sky and plains to the miniature scale of hand movements and the microscopic level of opening flowers is God, symbolized by both the circle embracing all of creation and the point, solitary and discreet, opening up into the universe. This is the subject of the next chapter, Religious Messages.

CHAPTER III

POSSIBILITIES AND LIMITATIONS OF HUMAN AUTHORITY, RELIGIOUS MESSAGES

The religious and political and literate influences on the gardens of these two cultures are not easily separated, and understandably so, as religion permeated every level of their activity. Religion has always acted to sanctify political and socio-economic hierarchies.

The Islamic garden is a model of Paradise, and Paradise is the perfect creation of God. God is created to comply with and sanctify the existing structures of humanity. The garden reflects political and socio-economic structures as they have been sanctified by religion.

The patrons of the Zen garden, daiymos and samurai were no less bloodthirsty and manipulative a group of powerbrokers than the Islamic sultans and viziers, but Zen is a personal path and as such is a refuge from the circumstances of political and economic power. It is the garden as a refuge that best defines the landscape garden in general and the Zen garden in particular.

On a metaphorical level these two religions influence the gardens quite differently. Both Buddha and the god of Islam are all pervasive; a series of superlatives: all-knowing, all-seeing, all-merciful. Islam is different from Zen, in that the Islamic god, is "other," separate from humanity. Except for the poetic and ecstatic elements of Islam, God does not reside in nature. The Islamic

gardener seeks in nature the marks of creation.

In Zen the issue is not Buddha but Buddhahood. All things are imbued with the potential for Buddhahood. As Buddhahood is all around, the trial of each person is an inward journey to discover it. The Zen gardener seeks out the soul of the elements of nature and sets out to release its full expression. Where God, because he is the creator, could set humanity up to have dominion over nature, Buddha was not the creator, but could show humanity how to approach nature.

Generalife

The form and content of Generalife garden have antecedents in religious images of the pre-Islamic Persian culture and the royal gardens of that period. According to Richard Ettinghausen, "... in Islam there exists both a sacred, visionary and a secular hedonistic tradition."[1] He continues his analysis of these two traditions by tracing their common origin as a response to the ecological conditions of Persia which is dry, arid and basically monotonous with only a few lush oases and mountain plains to break that monotony.

> Man then went beyond this natural phenomenon and with special water installations created the garden, and especially the formal garden, as a higher form of relief from this formless and hostile environment.[2]

The relationship of power to the garden is clear in a region of the world where the construction and upkeep of these luxurious and luxuriant gardens would require the command of immense power, capital and labour. On a more poetic level, Pierre Grimal suggests that the relationship between power and the garden is illusory.

> Merveilleux accord entre l'idée de puissance et le jardin, qui est soumission de la nature, de toute de la création, au pouvoir de l'esprit humain. Adam, lorsqu'il fut chassé du Jardin, parce qu'il a cédé à la tentation du SAVOIR, perdit sa royauté. ... Mais pourquoi fallait-il que le jardin et le savoir fussent incompatibles? Si il est permis de hasarder quelque opinion sur un tel sujet, on dira peut-être, assez rudement, que le jardin est un lieu d'illusions, où le Roi est flatté, bercé, ou l'on a accumulé les preuves (souvent imaginaires) de sa tout-puissance. Il est le théatre qui fait de lui une divinité.[3]

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[1] Richard Ettinghausen, The Islamic Garden (Washington: Dunbarton Oaks Trustees for Harvard University, 1976), p. 7.

[2] Ibid., p. 7.

[3] Pierre Grimal, "Jardin des Hommes, Jardins des Rois," Jardins Contre Nature 56 (1976), pp. 70-71.

Zoroastrianism and the Royal Persian Garden

The royal gardens in Iran were rectangular, enclosed, and divided into four equal parts. There are various explanations for this; James Dickie states:

> This iconography, closely connected with the mandala of Buddhist iconography, expresses a vision of the universe, a life symbol which, by virtue of its adaptation by conquering Arabs, was distributed throughout the entire extent of their empire.[1]

The early gardens had a central water tank that was fed by underground tunnels, partly to reduce the evaporation, and no doubt, to add to the shock and splendor of water spurting out suddenly from nowhere. The forms of these tanks were reflections of the gardens: regular and geometric, varying between ovals, circles, squares and regular polygons. This geometry was further accentuated by terracing the forms. The gardens contained a central fountain, that was placed above ground level, with the water flowing into a pool or pools. These pools reflected the surrounding plants and trees, creating a confusion of height, depth and dimension. The central fountain was sometimes replaced by a kiosque which was multi-storied to provide a dramatic view and a fresher, cooler breeze on the top storey. The plants in the secular garden were often exotic imports from China; the Persians, themselves, were not capable of cross-breeding. The plants were placed in pots. Colourful, flowering, and fruit-bearing plants were especially valourized. The rose was ubiquitous; in fact the Arab word for plant and rose is the same, 'gul'. Trees were sometimes gilded or completely replaced by artificial trees of precious metals and jewels.

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[1]Dickie, "The Islamic Garden in Spain," pp. 90-91.

The royal hedonistic tradition emphasized the extravagance, the love of water and the sensual aspects of the garden. Another tradition, "sacred and visionary," augmented and sanctified the hedonistic tradition.

It is useful to start with the advent of Zoroastrianism in order to trace the sanctification of this garden design, which will be herein referred to by its Arab name, 'chehar bagh'. In 326 A.D., Zoroastrianism was made the state religion of Persia, although it had been a major influence on the culture for some centuries already. This religion was very accepting of sensate needs and feelings, and though it insisted upon the holiness of family and agriculture, it did allow its adherents a wide variety of daily pleasures. Particularly significant was the tradition that three days after death the blessed would rise among sweet smelling flowers and be greeted by beautiful maids, who would sing the praises of those who had resisted harming or cutting down trees. This established the hyperbolic paradise imagery that was so well elaborated later by the Moslems.

The Chehar Bagh Sanctified by Islam

By 651 A.D., Islam had come to replace the old religion, and although not as tolerant as Zoroastrianism, it did accept the sensuous garden imagery, and added to it a more elaborate significance. Again the major elements of lovely cool shade, fragrant blossoms, and fountains were used to describe paradise, and the black-eyed maidens, 'houris', were joined by equally as lovely 'ghilman', black-eyed boys.[1]

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[1] Arthur J. Arberry, The Koran Interpreted (London: Oxford University Press, 1964), Sura 78/34, as quoted by Annemarie Schimmel, "The Celestial Garden," The Islamic Garden (Washington: Dunbarton Oaks, Trustees for Harvard University, 1976), p. 15.

Middle Eastern tradition had already divided the world into four parts, to coincide with the four points of the compass. Islam, following the Judeo-Christian tradition, divided the world by the four rivers of Eden, the Gehon, identified as the Nile, the Pison, identified as the Ganges and the Tigris and the Euphrates. The connection was easily drawn between paradise lost, Eden, and the Paradise of the blessed, the same place becoming the first and last dwelling place of humanity. In Sura 55/46-75, Paradise is described as two gardens with two fruits, two fountains, etc. and continues: "O ... which of the Lord's bounties will you and you deny?"[1], which propelled the pious to interpret as a doubling of the twin garden to make the quatrapartite garden, which then corresponded to the quadrangular royal gardens of the previous Persian dynasty. Thus Paradise was a garden with the water of four rivers flowing under it.

The Moslems, overwhelmed by this mania for multiplication, took the numerology of the Quairan one stage further. Ibn 'Arab d. 1240 wrote that Paradise was also divided into three levels: one a garden for children who had not reached the age of discretion before death; one for believers who had to serve time in hell, and one for true believers, who could go straight to heaven. This later Paradise had eight levels, which can be seen as a doubling of the quatrapartite garden, i.e. 2x2x2. This was proof that God's mercy is greater than his wrath, as hell traditionally had seven levels.

Annemarie Schimmel suggests that this is another reason that the garden pavilion in Islamic cultures were octagonal, "hasht

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[1] Ibid., p. 21.

bihisht."[1] From a geometric point of view, an octagonal pavillion "fits" into a four-part garden easily. The mathematical-spiritual parallels are fascinating. Thus earth could be perfected in the four-sided garden, which itself was only a pale shadow of the either eight-tiered, or octagonal paradise, which was again only a rough version of the perfection of God, who was symbolized by either the circle or the point, infinity and nothingness. The parallel mathematical progress is from a small regular polygon to one with a greater number of sides, to one with an infinite number of sides, which becomes one and none; the square, to the octagon, to the circle, and point.

Although, from the beginning of Islam, some religious movements attempted to spiritualize Paradise as an abstract state of grace, and not a real or physical place, they never superceded the tendency to see it as a glorious extension of the royal garden. The most successful of mystics were those that spiritualized those sensuous, earthly things. Ruzbihan Baqli of Shiraz d. 1209 wrote that one could find spiritual recreation while looking into the face of the beloved, or by contemplating water or plant life. This being very close to Zen contemplative practices, it did not, though, become a dominant concept.

Schimmel explains that this idea was gradually elaborated, whereby plants were represented like angels in constant worship of Allah, in particular the plane tree 'fatiha' whose leaves resembled hands praying. Even leafless trees in winter were spiritualized to recall the saints 'bi-bargi', those who had embraced absolute poverty. Religious garden metaphor was never so beautiful as rain symbolizing

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[1]Ibid., p. 21.

the mercy of Allah; ("rahmet," meaning mercy, can be used to mean rain). "In short, everything in paradise, be it voice, scent, breeze, growing and loving is nothing but Allah, since everything is finally lost in Him and His eternal glory."[1] The image of Allah as an omnipresent force in scent, breeze, or voice, might seem to resemble the omnipresence of Buddha, but it is more a statement of omnipotence in the Islamic culture than the passivity remarkable in Zen Buddhist Japan.

Mathematics and Mysticism

The influence of Islam goes beyond the metaphoric or illustrative, beyond poetic conceits and religious 'mandalas' to a basic view of man and the world surrounding him. In the context of the garden, that relationship can be seen in the Islamic gardener's relationship to the natural elements. The most important concept (one that is fairly accessible to our Western minds) is that of the centre. It is a mathematical view of the world; one might even call it linear;

Soetsu Yanagi recognised the contrast between this tradition and the Zen. Although he is referring to Christianity, it is equally valid for the Moslem tradition that,

> God is an absolute being, distinct from that finite being called man; God is creator, man created. It is thus a fundamental characteristic of Christian philosophy to perceive the existence of God as independent from man .... The Buddha on the other hand is not a creator, as is suggested by his name, he is a man who has achieved Enlightenment. Every human being, according to Buddhism, may become a Buddha.[2]

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[1] Ibid., p. 13.

[2] Soetsu Yanagi, The Unknown Craftsman: A Japanese Insight Into Beauty (New York: Nodansha International/U.S.A. Ltd., 1976), p. 63.

The core of Islam is the idea or belief in the absolute nothingness of all, before the aloneness of God. Seyyed Hossein Nasr wrote:

> They (the sacred traditions) are, however, the bridge from the periphery to the Centre, from the relative to the Absolute, from the finite to the Infinite, from multiplicity to Unity.[1]

Hence, humanity sees itself outside of Ultimate Reality,

> ... ultimate Reality is at once Absolute and Infinite, the source of all being, of all consciousness and of all life, Itself beyond form; it speaks to mankind through revealed forms which, while externally bound and limited, open up inwardly towards the Boundless.[2]

Islamic artists see pattern (order in 'revealed forms') as ennobling matter. Seyyed Hossein Nasr refers to Islamic art as aniconic, i.e. the spiritual world is revealed in the 'sensible' world through geometry, symmetry, rhythm, and repetition.[3]

Keith Critchlow suggests that,

> ... mathematics was integral to his (the Islamic artist's) art as it was a 'universal structure supporting the intuitive insights that characterize all true art'.[4]

From this, Critchlow points out that geometry and mathematics are structures for a two-dimensional world, and that this is particularly well suited to the celestial world; that is, one step removed from the three-dimensional corporality of this world.

> The paradisiac world or world of motivation, intelligences, exists only two-dimensionally, the principal being that as

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[1] Seyyed Hossein Nasr, Introduction, Keith Critchlow, Islamic Patterns (London: Thames and Hudson Ltd., 1976), p. 6.

[2] Keith Critchlow, Islamic Patterns, p. 6.

[3] Ibid., p. 6, et passim.

[4] Ibid., p. 8.

> archetypes are 'released from the limitations of existentiality so also is their confinement within the dimensions'.[1]

Seen from this perspective, the form of the 'chehar bagh' becomes more than just pious metaphor for the relationship of humanity to the earth, paradise and God, but it becomes a key to the universe. The imposition of a circle in an octagon in a square on a parcel of the landscape becomes a mode of revelation.

Islam in Spain

In discussing the religious influences on the Generalife garden it is important to mention the special social and religious climate of the Islamic state in Spain. The attack on Spain by the Moors reached Toledo, the ancient capital of the Visigoth Spain, in 711 A.D. and thereby securing control of Spain. The Ummayad family founded the first dynasty in Islamic Spain. This dynasty has been characterized as being extraordinarily tolerant of non-Moslems. An example of this is the substantial evidence that Alhambra and Generalife were built by a Jewish chancellor, Yusuf ibn Naghralla.

What is important is the religious tolerance and consequent liberalism of the period. Oleg Grabar explains that the society of Islamic Spain was not a homogenous racial or religious unit. Besides the conquered Iberian and Visigoth peoples, the conquerors were a mixture of Berbers and Arabs, soon to be followed by converted Byzantines, and an enormous number of Jews. As well as a move to religious tolerance, these Arabs began an intense study of Greek texts, particularly Platonic texts, and moved to a secularism in art and life.

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[1] Ibid.

It was noted by Al-Maqqari, a contemporary historian writing in Morocco, that there were at least three statues of the human figure in Arab Spain and a number of animal statues. Although not the rule, they are indicative of the,

> ... progress of secularism, sensuality and the humanities, which I think, is indicative of a renascence, makes itself felt as an entity pervading many areas of life, including those of architecture, sculpture and secular love, now newly emphasized.[1]

The following poem by Ibn Gabirol, a Jew from Malaga, reflects the celebration of the greatness of God in terms that are Jewish yet accessible to his Arab patron. Its subject, in general, is art (a subject that Bargebuhr points out would have been impious in an earlier or later age) and in particular the movement of the viewer from the castle to an interior garden. (Bargebuhr presents a strong argument, stating that this is the Alhambra garden). What he describes is a 'dream Kingdom of his own in the tradition of his Biblical namesake Solomon'.[2] Writing of the water, he exclaims:

> ... to sprinkle the plants in the beds
> and to shed on the lawns clear waters (Hosea xiii 15)
>
> And also to water the Myrtle garden:
> They sprinkle the tree tops like clouds.
>
> ... the fragrance of which is like perfume fragrance
> as if they were thurified with myrrh-incense.
> (Song of Solomon iii 6; iv 14)

and further about flowers:

> Flowers lushly abundant, full of enchantment
> like roses, nards and camphor blossoms. (Song of Solomon i. 12ff)

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[1]Frederick Bargebuhr, "The Alhambra Palace of the 11th Century," Journal of the Warburg & Courtauld Institutes, Vol. 19 (London: London University, Warburg Institute), p. 201.

[2]Ibid., p. 198.

> They vaunt themselves, one above the other (they are all choice, however in our eyes).[1]

The very walls are reduced to two-dimensional surfaces that carry repetitive statements, "Power is to God," "There is no victorious one but God," and so on. The sheer intensity of the carving in its mind-boggling intricacy pushes the viewer away from the sensible here and now, to the ethereal.

> In this sense the whole building of Alhambra is permeated with a deeply Muslim sense of a permanent presence of the divine, not as a presence in human affairs, nor as a witness requiring certain modes of respect or certain modes of behavior (except in oratory), but simply as the unavoidable possessor of all creation and of all time.[2]

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[1] Ibid., p. 199.

[2] Oleg Grabar, The Alhambra (Cambridge, Massachusetts: Harvard University Press, 1978), p. 135.

Entsu-ji

Shinto and Tao

Three religions influenced the Japanese landscape garden. The oldest and only indigenous influence was that of Shintoism. Until 552 A.D., it was the dominant religion of Japan. It was marked by two elements, ancestor worship and nature worship. With the introduction of Buddhism,

> le shintoisme subsista, mais, sous la forme d'un culte d'état, tout extérieur. Après une opposition farouche, et au cours d'une histoire très mouvementée, on tenta de fondre shintoisme et bouddhisme. Le shintoisme y perdit une bonne part de son contenu spirituel.[1]

It is a Shinto belief that every hill and vale, rock and tree, sea and rivulet has a spirit, 'kami' that must be addressed and respected. Virtuous ancestors, remarkable natural formations, and even certain phenomena all can be deified. In fact there are almost eight hundred Shinto deities. Shinto has no regular communal worship like Christianity or Islam. In consequence the temples are very small and structurally resemble ancient Japanese houses. Private worship takes place in the home where the social and sexual hierarchies of society are reflected in the important role of the male head of the family. Public worship takes place in nature.

> Des cérémonies publiques se déroulent en tout endroit qu'on peut supposer être la demeure d'un dieu: dans les montagnes, dans les bois, le long des rivières. L'un de ces lieux est illustre: le Fuji-Yama, montagne située au sud-ouest de Tokyo, et qui est considerée comme une montagne sacrée.[2]

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[1] Encyclopédie universelle, 1962 ed., s.v. "le shintoisme," pp. 284-285.

[2] Ibid., p. 288.

The impact of Shintoism on garden design lay in the spiritualization of simple, common objects.

The second religion to have an influence on the structures of the Japanese garden was Taoism. Taoist principles as such took a weak hold in Japan; although admired and followed by the Japanese, they were not well understood. Taoist emphasized the mystical experience as a personal phenomenon more than a set of structures for social behavior. Two main principles marked Tao: the importance of simplicity and the search for emptiness. Tao was a way for the self-initiated élite. Tao provided a physical structure for garden design from which the Japanese could stray, modify or finally discard. The Tao garden in China and to a lesser extent in Japan was a 'mandala' or microcosm pattern after the greater macrocosm, the universe. The world was supposedly divided into four quarters, each guarded by a sacred being that, if respected, would bring prosperity. Lorraine Kuck suggests that this was the origin of the 'chehar bagh' garden. The indirect influence of Taoism through Buddhism to form Zen is much greater than its direct influence.

Esoteric Buddhism

The third religion to have an effect on the Japanese garden was Buddhism. This influence took two forms, that of an early Esoteric Buddhism and later Zen Buddhism.

The construction of the Esoteric Buddhist garden of the Heian period bears a large number of resemblances to the Taoist and Islamic gardens. They too were 'mandalas', representing the larger world order. Like the Islamic garden, the order of the garden was two-dimensional and this was never visible to the viewer; it depended on the intuition

of a bird's eye view. Thus, the dominant feature of these gardens was geometric regularity on the two-dimensional level.

Sakutei-ki

Sakutei-ki was written when the aesthetic-religious strictures of Esoteric Buddhism were on the decline, but before the organization of a Zen aesthetic. In it, though, can be found the germs of Zen garden design. The description of design shows a great sensitivity to visual and spatial order, but the explanation for these rules is religious and superstitious. Gerard Barrière wrote:

> ... nous nous trouvons plus, avec le Sakutei-ki, en presence d'un traité de morale que d'esthétique. Nous y cherchons vainement les termes beauté ou laideur mais y trouvons en revanche de nombreux interdits seulement compréhensibles à ceux qui connaissent l'existence d'un ordre cosmique et mythique de l'univers, ordre qu'il serait catastrophique de bouleverser ou déranger seulement un tant soit peu. Cet art est d'abord art de respect.[1]

In the mandalistic view of paradise there are seven parts.[2] These are all represented in the mandalistic Esoteric Buddhist garden. Some of the relations are obvious as in a garden pond representing the treasury pond, others are more obscure, as in an island in the pond representing the trinity. There are numerous religious conceits associated with the Esoteric Buddhist garden. Among them are the idea that an auspicious design would influence the spirits; that one could leave

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[1] Barrière, "L'emotion que peut donner ..." p. 62.

[2] The seven parts of paradise are: Bugaku-e, a place of music and dance; juge-e, a holy place under the trees; rabutsu-o, a place of the saints; hochi-e, treasury pond; sanzon-e, Amitabha in trinity (the merciful Buddha); horokyuden-e, treasury hall and koku-e, place of the angels and animals.

this detestable world before death (enri-odo) or that one could seek salvation or paradise in a righteous garden (gongu-jodo). These were all based on the tri-partite division of existence, heaven-earth-man (ten-chi-jin) where heaven is part of this earth, humanity is part of nature, nature is part of earth and therefore humanity can attain heaven on this earth. It is in this last conceit that we find the germ of Zen thought. With time, gradual and abrupt changes occurred that left Esoteric Buddhism behind and led to the rise of Zen and consequently the development of the landscape garden.

Zen began to posit the idea that if Buddha was everywhere, then it took no special ritualistic configurations to recall his presence. By the thirteenth century they had started to substitute images of the Buddhist trinity with images of animals and finally to only mark their place with rocks. It is not far to go to where the "... deity might be revealed as nature itself."[1]

The importance of seeing an object as itself, and nothing else came at the end of this evolution from Esoteric Buddhism to Zen Buddhism. Rocks which were originally named as the various Buddhist saints or trinity symbolized the saints, then the rocks started standing in for the saints and finally they were standing in for themselves as much Buddha as anything else. The emphasis of design for Buddhist monasteries was shifting with the development of aesthetics (albeit spiritualized) to design for individual private gardens. The final blow to Esoteric Buddhist garden design was the

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[1]Teiji Ito, The Japanese Garden: An Approach to Nature (New Haven: Yale University Press, 1972), p. 168.

belief proposed by the Zen priests that change was a symbol of eternity and nature, and that immutability was a symbol of death. Therefore geometry and symmetry were not at one with nature and hence the universal order, but were in fact deadening structures.[1]

Zen

> I have in the past committed myself to the opinion that art is not essential to religion, nor religion to art. The aesthetic impulse is inherent in man, and the only question for the philosopher of art is to what extent a particular religion educates or inhibits that impulse. I still consider such a statement true, but Zen Buddhism of all religions is the one that most specifically educates the aesthetic impulse.[2]

In this excerpt from the foreword to Zen, Rocks and Water, Herbert Read acknowledges the importance of aesthetics in Zen Buddhism.[3] As the spiritual development of Zen is centred on personal discipline, rather than a moral code, the aesthetic discipline of the artist was easily spiritualized. The goal of any Zen Buddhist is the attainment of enlightenment, which can be described as freedom from duality, by reaching Non-Dual Entirety, 'Funi'. This freedom is not to be confused with licence, which is simply slavery to the self. There are two roads to enlightenment, one is the easy road called 'Igyo-dô'.

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[1]Some of the contradictory advice given in Sakutei-ki is probably a result of the struggle between these two approaches to design.

[2]Sir Herbert Read, Introduction to Frederick Spiegelberg, Zen, Rocks and Water (New York: Pantheon Books, 1961), p. 7.

[3]Historians propose three main sects of Zen. The oldest is the Rinzai sect which was the first form to arrive from China via the monk Eisai at the beginning of the Kamakura period. It is this sect that most influenced garden art and Entsu-ji in particular, even though the other two sects Soto and Obaku were installed in Japan by the time of the construction of the garden.

For the artist or artisan this means reliance on tradition, repetition and utilitarianism as a guide to form. The other name for this easy way is 'Tariko-do', the way of the Other. With repetition and freedom from ambition, the artist attains dexterity and sureness. The strength of the work lies in the humble acceptation of tradition and is limited by the scope of that tradition.

The other way, the Way of Hardship or of the Self is called 'Jiriko-do' or 'Nangyo-do'. This is an individualistic approach. Here discipline is required to rise above duality, i.e. the spell of two (self and other). This road to enlightenment avoids 'self', 'other', 'desire', 'emotion', and interestingly enough, 'principles'. The artist or artisan that follows this way depends on chance and very often a high level 'madness' or 'drunkenness'. The artist or artisan must wrestle alone with the problems of form and find a singular solution. Whichever of the two approaches to enlightenment taken by the artist or artisan, the source of visual imagery always remains nature. The Zen way requires a special empathy with nature.

> There are several definitions of empathy, varying in subtlety and complexity, but essential to them all is an identification of form and spirit. The spirit submits to the form (when we comprehend the work of art in its concreteness) and the form submits to the spirit (when the artist molds the form till it receives with exactitude the impression of the spirit). Several Zen anecdotes illustrate the dilectical process -- for example, the best known one which suggests that the artist should draw a bamboo for ten years, become a bamboo, and then forget about bamboos when he is drawing a bamboo. In Zen philosophy this is called 'the rhythmic movement of the spirit' and what is implied is that the spirit unconsciously identifies itself with the organic growth and form of the bamboo. The artist then draws the bamboo with organic necessity, that is to say, naturally, with 'everyday mind'.[1]

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[1]Spiegelberg, Zen, Rocks and Water, p. 10.

Soetsu Yanagi wrote:

> Beauty from the Zen point of view, is the state of non-preoccupation, it is that which is in every respect free-dexterity not in the yoke of dexterity, clumsiness not in the bondage to clumsiness.[1]

And further:

> Objects that reveal ambition, objects in which lack of taste is knowingly simulated, objects where some quality such as strength or cleverness is exaggerated -- these will not be universally admired for long, though they may create a momentary furor.[2]

In all major Zen activities, flower arranging, the tea ceremony, Nō theatre and garden design (especially dry garden design), the key note is frugality raised to a level of virtue. The other key note of Zen creations is irregularity. The balance inherent in frugality and in irregularity recalls 'Shibui' or 'shibusa' which can be translated as, austerity without severity, or subdued restraint.

In discussing tea, probably the most representative Zen activity, the importance of change or process, irregularity and frugality is described by Kakuzo Okakura in Book of Tea:

> The dynamic nature of (Taoist and Zen) philosophy laid more stress upon the process through which perfection was sought, then perfection itself. True beauty could be discovered only by one who mentally completed the incomplete. The virility of life and art lay in its possibility for growth. Since Zen has become the prevailing mode of thought, the art of the Far East has purposely avoided bilateral symmetry as expressing not only completion but repetition. Uniformity of design was considered fatal to the freshness of imagination. In leaving something unsaid, the beholder is given a chance to complete the idea, and thus a great masterpiece irresistibly rivets your attention until you seem to become actually part of it. A vacuum is there for you to enter and fill up to the measure of your esthetic emotion.[3]

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[1] Soetsu Yanagi, The Unknown Craftsman, p. 138.

[2] Ibid., p. 143.

[3] David Engel, "The Meaning of the Landscape Garden," Landscape. Vol. 8, No. 1 (Autumn 1958), pp. 11-14.

Yanagi wrote that this beauty comes from introversion, turning to the inner radiance. Hence monochromatic and tranquil colouring is valourized, blacks, brown or soft whites. Sparseness in the Zen garden led to the actual leaving out of elements, where nothing would stand in or symbolize them. This is called 'Yugen'; it is 'the word unspoken, the view unseen'.[1] The relationship between these aesthetic principles and our reactions on an emotional level, describes the meaning of 'fuzei'. The Rambachs wrote:

> Il est difficile de transcrire le sens de 'fuzei': cet idéogramme évoque l'apparence, l'air, l'impression. On trouve en composition dans cet idéogramme le caractère 'shin' qui signifie coeur mais aussi âme, pensée, esprit. Ainsi on pourrait traduire 'exprimer le fuzei' par: donner une impression, tout en provoquant une émotion.[2]

Zen is not a tightly defined discipline, consequently its characteristics are difficult to list, nevertheless Shinichi Hisamatsu has proposed seven distinguishing marks of Zen art:

1) Kukinsei -- 'Asymmetry'; open balance.

2) Kamso -- 'Simplicity'; careless, unreflecting.

3) Koko -- 'Precious simplicity'; noble, without adornment, patina that comes with age.

4) Shizon -- 'Spontaneous nature'; unaffected real nature, as opposed to mere nature.

5) Yugen -- 'Unfathomable depth'; inwardly reserved, using what is not expressed to express infinity.

6) Datsuzoku -- 'Overcoming the world'; not tied to an object.

7) Sajaku -- 'Pure stillness'; not noisy.[3]

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[1] Edward Hymans, A History of Gardens and Gardening (London: J. M. Dent & Sons, Ltd., 1971), p. 67.

[2] Rambach and Rambach, Sakutei-ki, p. 22.

[3] Schaarschmidt-Richter, Japanese Gardens, p. 71.

Josiah Condor suggests that the back and forth between aesthetic principles and the superstitious beliefs involved in the Japanese garden was simply a class phenomenon,[1] the literati valourized aesthetics as ethics, and explained them to the 'vulgar' as a question of good or bad omens. Certain political-social strictures were supported by general religious beliefs, hence, the Emperor who was considered divine was the only person allowed to have the height of his stepping stones attain six inches, by association the Daimos could rise above the earth, up to four inches, samurai three inches and the rest of humanity half an inch. This stricture from the Sakutei-ki was often ignored.

As much as the aesthetics of the landscape Zen garden well associated with contemplation and consequently with those who had lots of time and money to spend, the actual bearers of the tradition were not those noble men and women. Even during the time of the writing of the Sakutei-ki, late twelfth century, the author was complaining that the only people that knew what they were doing were the lower class gardeners. At the best of times gardeners, like writers, were the sons and daughters of lower class nobles and at the worst they were the river people, the lowest social level of Japan. Gradually, with the decimation of the nobility during various civil wars and the general upset of education, etc., the responsibility for garden design rested with the labourer-gardener. Often the Zen monk had to go to these people for advice and teaching, which seems to have pleased certain monks as they felt they were then in contact with a naturalness lost by the educated classes.

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[1] Josiah Condor, Landscape Gardening in Japan (New York: Dover Publications, Inc., 1964), p. 8.

CHAPTER IV

PHYSICAL PLANS OF THE GARDEN

Entsu-ji

The physical structures of the Japanese garden begin in the careful observation and respect of nature. There is of course no such thing as objective observation and the Japanese gardener seeks in nature a pattern that is irregular and incomplete so as to allow room for growth. It is important to keep in mind that the Zen respect for the visible appearance of nature does not exclude illusion from the garden, but it is illusion used to accentuate the image source, nature.

Pattern

The source of true pattern in Japan is nature seen through the humility of the creator. Soetsu Yanagi wrote:

> A pattern is both true to nature and artificial .... The plant is a product of nature. The pattern is this plus a human viewpoint. The original plant is still "raw," nothing more than a given material. The viewpoint is what gives it content. Without a viewpoint, seeing is no different from not seeing.[1]

The importance of rendering invisible the gardener's touches is a concern constantly mentioned in Japanese texts.

The seduction of the garden is in the closeness of its appearance to nature, its model, while accepting that the model will never

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[1] Yanagi, The Unknown Craftsman, p. 113.

be attained. This is called 'mono-no-aware', or synthesis with nature. In referring to pattern in Japanese craft, Yanagi wrote, "No bamboo grass in nature can be more beautiful than a bamboo grass pattern. If we see nature as beautiful, then we are, in a sense, seeing it in patterns."[1] The rational structures of mathematics and geometry were denied to the Japanese designer, although the craftsperson by accepting the Way of Given power,[2] tends to greater symmetry and more grids. The artist-gardener attempts the Way of Self-Power,[3] and is at one and the same time closer to the constantly changing model of irregular and asymmetric nature and yet more audacious in approach. Both approach pattern and structure through intuition. Unlike the Islamic artist, who had a presentiment of the inner mathematical structures of animate and inanimate matter before the microscope, the Japanese artist or craftsperson depends on an intuitive view of visible nature. As well, the Japanese creators start with the surface appearance of nature. If all is Buddha, then there is no need to go further than visual reality. In the work of the Islamic artist, beauty and Godhead lie in geometric structures, their complexity, intensity and growth.

The beauty of the Japanese work is in its appearance. Itoh wrote that a beautiful flower can exist but that the beauty of a flower cannot exist, as beauty cannot be separated from the object of beauty.

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[1] Ibid., p. 115.

[2] See p. 47.

[3] See p. 48.

Void and Irregularity

The leitmotif of Japanese patterns is the interdependence of void and irregularity; nothing could be further from the Islamic sense of pattern.

> The precise and perfect carries no overtones, admits of no freedom; the perfect is static and regulated, cold and hard. We in our own human imperfections are repelled by the perfect: since everything is apparent from the start and there is no suggestion of the infinite. Beauty must have some room, must be associated with freedom.[1]

This "room" or "void" in the landscape garden is nurtured by irregularity.

> This is the beauty I refer to, for want of a better word, as 'irregular' -- irregular not in the sense of being opposed to the regular, but simply that when one does not consciously aim at either there is always a little something left unaccounted for.[2]

The void in the garden or in a painting is the room left to be filled by the viewer. To fill in the void the gardener then has to have a source of images. The source of images is the recognition of the "tayori" or "virtualité du paysage."[3] 'Tayori' involves understanding the principles of scale and proportion of the topography as well as a subjective reading of it. In the Sakutei-ki, the designer is impressed to, "... remember the celebrated landscapes of the country, and keep the spirit of their best parts. Then your garden can recall them while in keeping with the site."[4]

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[1] Soetsu Yanagi, The Unknown Craftsman, p. 120.

[2] Ibid., p. 121.

[3] Rambach and Rambach, Sakutei-ki, p. 35.

[4] Ibid., p. 25.

Various techniques are used to poignantly recall a landscape in the garden. To emphasize distance the gardener placed in the background trees and stones that exhibited perpendicular lines to the horizon. Fine leafed trees were placed in the foreground as they tend to appear closer. Recognizing that movement brings objects closer, water or plants that move with the wind were situated in the foreground. The Sakutei-ki recommends:

> One must not place the mountain of the garden exactly in front of the real mountain because the character for mountain placed above the character for steep slope can evoke the idea of calamity.[1]

Obviously, there is another reason for this, and that is that such closeness makes for too precise a comparison and the illusion of a small mound standing in for a mountain would be ruined. A rough sense of perspective is necessary to connect the garden with its wider landscape model.

> If you place a large number of stones in the same area, it might be good for closeup, but not from a distance. The placing of stones must be done from the point of view of a great distance.[2]

Perpetual Change

The garden is subject to the changes with time that stretch from the almost imperceptable movement of light throughout the day, to the radical changes of day and night, the changes of the seasons and the greater time periods of decades and centuries. Philosophically, the Zen thinker accepts change as a means to retain a kind of permanence.

The Zen teaches that humanity is inside nature and is therefore

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[1]Ibid., p. 213.

[2]Ibid., p. 155.

part of the cyclical changes witnessed in nature.

> ... By sacrificing an urge to immortality, and through a knowing acceptance of himself and his world, he stops time. He has found a way to freeze it, to make it permanent. He does this, not through pyramids and ziggurats, but by letting it have its own way.[1]

An excellent example of this is the shrine of Ise, in the Mie Prefecture which is of Shinto origins but expresses a Zen principle. The seventh century shrine has been regularly destroyed and then reconstructed on an adjoining and identical plot every seven years. The only mark left on the old plot is one wooden post, which is sheltered and will serve as the starting point when the new shrine is built. This idea of mutability, 'mujo' or perpetual change, 'seisei-ruten' allows the garden to bend and reform with the vissisitudes of time and allows it to triumph over mortality.

Hazel Gorham explains that the Japanese appreciation of the garden is not restricted to one part of the year; in fact the snow viewing party of wintertime is listed as one of the flower festivals. The blossoms of cherry trees in the spring and the coloured leaves of the maple were especially appreciated, but with a few exceptions, they do not make their way into the garden, mainly because they were considered to be uninteresting during the greatest part of the year. Evergreens instead symbolized the right degree of fidelity and constancy. Deciduous trees do not seem to change with the seasons, but rather seem to come to a full stop.

As the main elements of the Entsu-ji garden are evergreen trees, hedge and rocks, the principles of its design are evident and function

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[1] Hyams, A History of Gardens and Gardening, p. 138.

well even with a layer of snow covering it (although the snowfall there is not so heavy, see Fig. 40). The whole garden's structures are visible during the evening, and while the moon rising above the mountain has reached the level of a cliché in Japanese painting, it remains a poignant image in the garden setting (see Fig. 39).

Generalife

The overriding features of the physical appearance of the Islamic garden are symmetry and geometry. There are two sources for them, one is mathematics and the other is agriculture. This first influence can be seen in the layering and supportive relationship of the galleries, canals, kiosques and pathways to the garden. As well, these units are each mathematically divided into modular units that allow a flow of lines and forms from one surface to another.

The other influence, that of agriculture, can be seen in the full rein that was given to the botanical taxinomic urge. The practice of cross-breeding, transplantation of wild plants and the importation of foreign plants was a well developed science in Andalusia. It therefore comes as no surprise that the gardens contain a wide variety of species each in their own separate pot, tub or bed. The separate tubs allowed for the different needs of the plants; many outside of their natural habitats, as well as an isolated environment for cross-breeding or grafting. The linear arrangement of the plants may have had an agricultural as well as mathematical source as it allows for maximum use of sunlight and water.

Mathematics and Science

The vocabulary for the Islamic garden is largely mathematical. Arthur L. Loeb supplies a definition of array, order, pattern and structure in the introduction to his book, Space Structures: Their Harmony and Counterpoint.

> It is appropriate here to define structure. Let us assume that we know what array is: simply a collection of entities. A pattern is an ordered array: the different entities in the

> array bear a well defined relation to each other. The set of relationship between the entities in a pattern is called the structure of the pattern. The pattern need not be a visual one.[1]

The elements of Arabic geometry are the point, the symbol for unity and source; the line, the point moving in a direction that symbolizes polarity; the arc, the movement of the line pivoting from the point (which creates a boundary); and the circle, the closing of the arc on itself to form a domain. The circle stands for the separation of subject and object, known and unknowable. Within itself the circle expressed 'threeness', in the words of Keith Critchlow, as the centre, domain, and periphery, or, in its context expresses 'fourness', centre, domain included, boundary and domain excluded. If the circle shrinks, or the point expands, they express reabsorption and reintegration. This movement acts to deny the separations inherent in the circle. Beyond the circle the three geometric forms that dominate Islamic structures are the triangle, square and hexagon. The particularity of these forms is that they can fill a space and leave no empty spaces, whereby the entity in an array forms a unity. Keith Critchlow postulates that tracing the centre of creation means not going backward, but rather inward, geometry allowing an insight to the universe.

There are two sources of natural-geometric imagery; one can be called crystaline and the other is vegetative. The crystaline images include rock crystals, frost or snowflakes, the vegetative images can be seen in the opening of a rose, or the seed pattern of a number of

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[1]Arthur L. Loeb, Space Structures: Their Harmony and Counterpoint (Reading, Massachusetts: Addison-Wesley Publishing Company, 1976), p. xvii.

plants. Nature is not a source of imagery in Islamic art when it runs counter to the geometrical plan of the universe.

The patterns of the Islamic gardens are knowable although they may be complicated and multileveled. They are mystical rather than unknowable or mysterious.

> In the Occidental garden ... a person always knows where he is in such a place, he sees it from above as it were. He will never become lost while taking a stroll because he, the lord of creation, has himself made his garden.[1]

The discoveries made by Jesús Bermudez Pareja after the 1958 fire of the Generalife garden clarify the image of the original garden. He established that the form of the canals was cruxiform and that the parterre (flower bed) level was some 55 cm. below the level of the walkway (see Fig. 4). Several very practical reasons can be given for this, the first of which is that the soil from the parterre could not fall upon the pathway or be splashed up by rain. Another is related to the discovery of water outlets on the side of the flanking watercourse. These could be opened for the irrigation of the beds. Aesthetically, the level difference acts to emphasize the geometric nature of the enclosure, it guarantees that the vegetation does not touch or interfere with the architecture, and finally, it creates the illusion of a carpet threaded with flowers. The sunken beds spread out in a sequence of small units that resemble the scale of carpets, which bring sources back to a full circle as the original inspiration for carpet design were gardens. Thus, a study of contemporary carpets indicate form and content of the gardens.

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[1] Ito, The Japanese Garden, p. 138.

The important element in the architectural garden is the imposed two-dimensional structure. The paths of the Islamic garden, like lines in geometry, imply direction. The paths never wander, they go from the central pavilion out to the long or to the short side of the rectangle; they are reinforced by the lines of the waterway and the lines of the architecture. The very surface of the path is divided into dense geometric patterns covered with ceramic or mosaic tiles. Where plants can not be contained by architectural-geometric elements, they are then lifted above the surface, almost removed, into pots and flats. At entrance points and points of intersection, evergreens that can be clipped into planar surfaces, are used to introduce the architecture into the garden.

> In Ibn Luyun, we find the design that might have inspired it: 'There must be a kiosque in the middle of the garden for those who want to rest in it, that looks out in all directions, in a way that anyone who enters cannot hear what is being said inside, and that nobody can come in without being noticed. The kiosque must be surrounded by climbing rose bushes, myrtles and all the plants that adorn a garden. It would be longer than it is wide, so that the eyes will find entertainmentin contemplating it'.[1]

The Book of Agriculture

The physical structures of the Islamic garden are intimately related to the study of horticulture, botany, agriculture and pharmacopoeia. The greatest development of these sciences in the Mediterranean cradle was in Moorish Spain and in particular, Andalusia. Part of this is due to the continued links with the central Islamic Empire.

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[1] Jesus Bermudez Pareja, "El Generalife despues del Incendio de 1958," p. 27.

Greek, Indian, and Pahlavi texts were being transcribed into Arabic in Bagdad. With the migrations of intellectuals and experts to the Ummayad Empire in Spain, Cordova became the centre of research and learning. Of the numerous texts that were written, two have been especially considered by John Harvey in his paper, "Gardening Books and Plants Lists of Moorish Spain." The oldest is by Ibn Bassal, the keeper of the botanical gardens of the Sultan of Toledo during the late eleventh century.

> The book is thoroughly modern in tone and starts with a discussion of water supply, soils, manures and its preparation. Particular chapters then give, species by species, methods of planting, pruning and grafting trees, sowing of seeds, and the different classes of vegetables, herbs and aromatic flowering plants and bulbs.[1]

The second book was written a century later by Ibn al Awwam. In addition to the information already given by Ibn Bassal, Ibn al Awwam deals with transplanting of wild plants and trees into the garden, as well as agricultural texts on cattle and horses and poultry. Special attention was given to cross-breeding and the introduction of new plant breeds from the Near East.

A comparison of The Book of Agriculture by Ibn al Awwam and the Sakutei-ki by Yoshitsune Gokyohoko; two contemporaneous gardening and agricultural books, clearly shows how close the architectural garden is to the kitchen garden (no distinction is made between the two in Awwam's treatise) and how distant those issues and structures are from the landscape garden. Oddly enough, plants are the main issue in books on the architectural garden. Those writings dealing with the

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[1] John Harvey, "Gardening Books and Plant Lists of Moorish Spain," Garden History, Vol. 3, No. 2 (London: 1975), p. 11.

Andalusian garden are even more specifically about plants that bear fruits, flowers or treasured fragrances. The structure seems obvious to them, and hence not a subject for discussion, agricultural models dictated a linear symmetrical pattern and the religious significance of geometrical patterns required a simple unchanging symbol to match the orthodoxy of Islam.

In the landscape garden the specialization of cross-breeding and transportation of rare and exotic breeds is not important, as the general locale would supply the plants appropriate to the garden. In the books on the landscape garden, the main issue is placement. In Sakutei-ki the greatest emphasis is placed on rocks, their selection, placement and upkeep. This obviously is not an issue for the architectural gardens. Both architectural and kitchen gardens are started by completely levelling the site if the garden is on a hill, then the garden is terraced so that it is a series of usable planes.

Rocks are important in the landscape garden because they establish that ambiguous relationship between the garden and nature. Is it really nature? Where does nature begin?

CHAPTER V

ROCKS, STONES AND CERAMIC TILES

Entsu-ji

Rocks are the major element in Japanese garden design. Rocks, whether they are cut or left in a natural state, are used to break up expanses of plant life, to provide a contrast to the growth of plants and the constant movement of water, to mark off sections or lines in a garden, and to establish the garden in the landscape. Whatever their size, texture, or form, their most distinguishing feature is their immutability.

Shape Categories

Before examining the levels of symbolism of stones and rock, it is important to establish the vocabulary of their shapes. There are five stone radicals listed in Japanese garden books. Josiah Condor gives them in the following order. The first is the 'Taido-seki' or 'statue stones', these are tall vertical stones with slight middle bulge, their name demonstrates their anthropomorphic form. The second radical is 'Reiji-seki', or 'low and blunted at the top'; the third radical is broad flat stones that lie horizontally; they are called 'Shintai-seki', 'Flat stones'. The fourth category is for medium height stones that are basically vertical but are leaning over. The last radical is called 'Recumbent Ox Stones', 'Kikiaku-seki'; these are horizontal stones curved and higher at one end than

the other[1] (see Fig. 50).

Symbolism and Levels of Formalism

Katsuo Saito and Sadaji Wada in Magic of Trees and Stones,[2] lists six levels of symbolic awareness in the Japanese garden. The first is natural symbolism, where the basic physical aspects of the stones and rocks represent physical aspect in the greater outer world; the second is mood symbolism, where the rocks represent abstract ideas. These are literary and can be guessed at without a profound knowledge of the culture that fostered them. The third is idea symbolism; this is definitely culturally specific. Here the rocks represent or function according to world views. The fourth is the spiritual level symbolism; this, to the Westerner is a mélange of visual line movements and Japanese animism. Essentially it is the line that the 'kami' (spirit) takes to leave the stone (see Fig. 51). Finally, there is the melodic symbolic level; at this level the presence of the stones, weak or strong, moving to a climax is seen in a musical metaphor.

Natural Symbolism

The natural symbolism of the stones is obvious, and easy to follow; the statue stones (vertical with a middle bulge) are used for steepness and the low vertical stones for stability, the arching stone for movement.

As the whole or sections of Japanese gardens are constructed to

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[1] Josiah Condor, Landscape Gardening in Japan (New York: Dover Publications, Inc., 1964), p. 46.

[2] Katsuo Saito and Sadaji Wada, Magic of Trees and Stones: Secrets of Japanese Gardening (New York: Publishing Trading Company, 1964), p. 18.

be seen from single and particular points of view (with the exception of eighteenth and nineteenth century touring gardens and tea gardens) one can talk about above and below eye level. Thus stones that are above the eye level appear larger than they are; they loom up and so are used to represent mountains. The stones that lie below the eye level will seem smaller, and so are used to create the feeling of plains or the rocks in a running river.

In Entsu-ji, a dry water garden, the stones do not sit as they would in a stream that had dried up, but must suggest the force and movement of the water. The stream that these rocks suggest is quietly flowing. The majority of the rocks are low stones; some are blunted and others rounded. There are a few medium sized rocks, some leaning and a few upright. There are no tall vertical stones which is indicative of the more modest nature of Entsu-ji garden. The few medium height vertical stones begin well away from the view of Mt. Hiei. They are arranged on radiating lines, the larger stones father behind the smaller. All the stones are arranged below eye level, consequently the garden has a calm and unimposing aspect (see Fig. 24).

Mood Symbolism

There is a specific mood symbolism assigned to each of these stone shapes. These symbolisms are all based on the concept that stones should impart stability, and that stability imparts nobility. Hence, the two vertical and straight stones symbolize nobility. In particular the statue stone represents heroics, because of its greater size and no doubt because it so closely resembles the human form. By contrast, the most irregular shape is that of the arching

stone, and it comes as no surprise to find that at its best it represents eccentricity and buoyancy and at its worse, rashness.

The last two radicals, by their horizontal nature, embody more modest principles. The recumbent stones give a sense of peace and tranquility, whereas the flat stones symbolize constancy. Their unremarkable form and closeness to the earth gives them a kind of countrified modesty. In any of the stone radical types, rough and angular stones imply austerity, and by rounded stones the viewer infers mildness. The mountain is the prototype for all the stone radicals. It stands for intelligence and constancy. Water stands for emotion. In this plan, ideas are static, whereas emotions are in flux; hence the water animates the mountain as emotions animate ideas.

The Japanese were very aware of the symbolic and ecological contrasts of water, rocks and trees. The water is ephemeral in its changing surface and constant in its unceasing movement. It is this unceasing movement that wears down marks and finally destroys the apparently permanent rock. Likewise, the vulnerable trees and plants are eternal in that they put out fresh buds and new leaves each year.

In terms of mood symbolism Entsu-ji is obviously a more emotional and less dignified garden than its near contemporary Ryoan-ji. There is, though, a touch of austerity to Entsu-ji due to the roughness of the rocks. The relationship between natural and mood symbolism is evident in that the garden rocks represent a stream, hence water and the garden symbolize emotions which are represented by water, real or implied.

Idea Symbolism

An example of idea symbolism is the Taoist tradition of the tortoise and the crane. Both animals were associated with long life. The tortoise was said to live ten thousand years, while the crane was supposed to live one thousand years. In garden design this was manifested in the construction of island gardens, discussed later in the plant section of this essay.

To symbolize the crane, an upright rock was planted; to symbolize the tortoise, a large horizontal rock. Similarly a tree, usually pine, was planted on the summit of one of the islands. According to a Buddhist tradition, the world was supported by Mt. Shumisen and it, in turn, was surrounded by eight oceans. This rock would also be associated with the seat of Buddha. In some dry rock gardens where the rocks symbolized the running water, an irregular flat topped rock would be placed to symbolize the celestial ship. By the time of the construction of Entsu-ji garden the Japanese gardener had become less concerned with the iconographical content of these and other formations, and just used the names to identify particular formations.

Spiritual Symbolism

This traces the movement of the spirit of 'kami' from the rock; a sensitive viewer could probably describe the line movements much the same way as one would analyse the movements in a sculpture (see Fig. 51). These visual movements were, though, taken as the line of the 'kami' entering or leaving the rock. The lines are a function of the form and mass of each of the stones and their interrelationships. Most of the rocks only had one 'kami' and hence one line of direction

for it to leave the rock, but at some point, the irregularities of a rock were so great as to have in it two or even three 'kami', like Siamese twins uncomfortably sharing the same base and straining in opposite directions. Hence, a very unstable figure. The more unidirectional or uniform the movement of the rock's lines, the more dignified the garden. The lines of the kamis of the rocks of Entsu-ji garden are unidirectional and vary only slightly from that path in the kami lines of the leaning medium height rocks, again reiterating the sense of a quietly flowing even lazy river.

Melodic Symbolism

The melodic symbolism seems much like the spiritual symbolism in that the basis for the analysis is the physical form of the rocks, and this is then interpreted in a symbolic context. So the stones were seen as either weak or strong, and the movement from one to the other created a rhythm that was not just interpreted on a visual level, but was also seen on a musical level. Although the rocks of Entsu-ji garden are low-lying and rather stable, they are very strong in their various grouping and in the movement from one group to another (see Fig. 34).

Placement of Rocks

In terms of the placing of the stones in the garden, the Sakutei-ki demands, "You must place the stones while respecting the topographical characteristics of the garden and the pond,"[1] and further, "You must as well express the 'fuzei' which can recall a

[1]Rambach and Rambach, p. 19.

natural site while conserving the original aspect of the stones."[1] When choosing stones, Yoshitsume Gokyonoko suggests that:

> You add the secondary stones according to good 'assemblage'. One should choose large principle stones with sharp edges, rocks from the mountains. One must arrange the additional stones according to the needs of the principle rock. In general you must choose those rocks that have beautiful tops, even for the secondary stones. If only the top of the principle rock is beautiful, the faults of the body can be hidden by the surrounding rocks.[2]

The Japanese were extremely sensitive to the placement of stones. They had to be set in the same position in which they were found; hence horizontal stones could not be stood up on end, and vertical stones that were placed lying down were referred to as 'dead stones'. The only exception to this being in the 'Kare sansui' garden, like Entsu-ji, a dry water and stone garden. Here rocks small or large could be overturned in acknowledgement of the power of running water to move anything in its way. If, though, a rock or stone were turned over, it was important that it be overgrown with lichen and moss so as to lend age and dignity to the stone.

The moss of Entsu-ji garden growing on stone can be understood by exploring the meaning of the Japanese word 'shibusa'. This word literally means quiet and refined taste. It has, though, gone through several phases of meaning. First, it meant light and elegant, then the concept of mystery entered the word, and finally the word began to mean intensification of subtlety. The Entsu-ji garden was built to be at one with the second phase of the meaning of 'shibusa'. The beauty of the rocks was veiled by the moss yet remained evident. This was seen as a refinement of the rocks.

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[1] Ibid., p. 22.

[2] Ibid., p. 174.

There was a tradition that saw moss as a sickness of rocks, a kind of scum on them. It suggested that the rocks should be periodically cleaned of the moss so that they retain their true original and interior nature. In a number of dry rock gardens this in fact was done. That with time the moss has been allowed to grow on the stones of Entsu-ji, and the cryptomeria and Japanese cypress have grown much larger and thus cast a heavier shade, moves the garden away from its original tie to the meaning of Shibusa as light and elegant with a touch of mystery, closer to the meaning as intensification of subtlety.

This acceptance of nature as an agent of change is a mark of the landscape garden. Matsu Yoshikawa points out that the moss was not originally part of the garden. Stylistically, Entsu-ji was constructed in a similar framework as Ryoan-ji, although there were simply too many rocks to make for that stark simplicity.[1] Entsu-ji, according to Irmtraud Schaarschmidt-Richter, although less austerely spiritual, is "splendid with an almost worldly splendour."[2] The rocks of Entsu-ji follow the basic guidelines for the use of rocks in a Japanese garden.

Most Japanese authors agree that the rocks form the backbone of the garden, and that the plants function as the filling out, the flesh. The rocks also serve to set the scale of the garden. Like plants, the garden designer avoids the use of exotic or freakishly coloured or shaped rocks. The rocks used must fit in with an image already seen or known and, as it were, assimilated into the Japanese consciousness.

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[1] Schaarschmidt-Richter, Japanese Gardens, p. 73.

[2] Ibid.

As already mentioned, the image source for the rock formation of Entsu-ji is a gently flowing river. The stones are arranged in three rows. Each row is made up of irregular groups of irregular numbered rocks. The rows generally diminish in height from left to right and each group diminishes in height from left to right as well. All this to give the sensation of an insistence flowing. Mitchell Bring and Josse Wayembergh are alone in suggesting that the small bushes are trimmed to compliment the movement of the "river," as well as to compliment the shapes of the rocks. They also suggest that the three rows are marked by the major rocks which sit on radial lines which meet on the viewing platform, all of which increase the sense of depth in the shallow garden. The rock formations are on the left side of the garden, and their movement leads our eyes to the view of Mt. Hiei (see Fig. 34).

Stones with bent or broken tops were referred to as diseased stones, the same epithet that was sometimes used to describe moss covered stones. Rocks were arranged in groups of odd numbers that added up to an odd number. Although groupings of two exist, the favourite numbers were three, five and seven. Any stones that did not obviously belong to a group or were not at least related to a group by compliment or opposition were called 'poor stones'.

The basis for all the valorizations of the stones in Japanese gardens is Shintoist animism, whereby spirits inhabit all natural formations, rocks, waterfalls, etc. Visually strong texture was summed up in a word, 'sabi', which would be most closely expressed for us by the word patina. This was an important quality in stones. Rocks that were to be used in mountain gardens would be taken only

from the mountains and were referred to as 'yama-sabi'; those from the sea used to form a seascape, 'hama-sabi'. None of these were highly coloured stones.

Yoshitsune Gokyohoko wrote on the selection of natural scenery:

> The seascapes, Hirotaka continues, are very interesting, in particular the coast beaten by massive waves, but one must not copy these powerful and bizarre scenes because such a composition would not last.[1]

In terms of planting the stones, the bulk of each stone was buried beneath the soil so as to give it stability. The rocks in a 'kara senzui' garden, i.e. dry garden, were placed asymmetrically in groups of three, five and seven. This asymmetry worked very consciously to break up the harmony, 'hacho'. The use of stones for stepping stones exhibits the same calculated balance between naturalism and human structures.

Stepping stones were usually made of faceted or planar rocks such as schizt, slate or flint. If the rocks were non-planar, then water worn or rough hewn granite would be used. These stones were placed at irregular intervals to avoid a narrow plank appearance and as well to give a more natural and artistic appearance. It is interesting that the tread between the stones is even but that the actual stones are unevenly placed. On a very practical level the Sakutei-ki suggests that there be at least four inches between each stepping stone, for cleaning purposes. These stepping stones start at the verandah; in fact the first stone is always a large granite stone that holds the wooden support and it is the first stone on the path. Stepping

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[1] Ito, The Japanese Garden, p. 206.

stones are a good example to further examine the idea of 'shin', 'gyo', and 'so'. Shin basically means formal and 'gyo' less formal and so the most informal. 'Shin' paving stones are those that fit closest to the Chinese model. These are cut and hewn stones rectangular and regular (at least in Japanese terms). 'Shin' can be as well associated with completeness.

'Gyo' paving stones are a mixture of cut and shaped stones and smaller irregular stones. 'So' pavement stones are the most scattered and begin to be absorbed into the environment. If the 'complete' garden, filled with mountains, rocks, ponds and so on, represents 'shin', then a garden with less actuality and some symbolism represents 'gyo', and the dry garden composed of sand and rock is 'so'. In terms of stepping stones, the stones with small and regular spaces between the artificially shaped stones is 'shin' (see Fig. 46), the spaces between 'gyo' stepping stones are larger (see Fig. 47), and finally, the spaces between 'so' are the largest and the stones are only natural (see Figs. 48 and 49).

It is important to realize that 'shin' does not mean severe, or 'dry'. Hence Ryoan-ji is not a 'shin' garden as the garden is not complete; the greater amount of symbolism in a garden, the further it moves from 'shin'.

This very detailed attention to the rocks in a Japanese garden, in particular a 'kara senzui' dry garden such as Entsui-ji is accorded because these stones were not inanimate neutral elements, but rather the backbone of the gardens. As Itoh Teiji wrote, "though many dry gardens used moss, grass, even trees, as well as sand and stone, it was the stones themselves which were considered important."[1]

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[1] Ito, The Japanese Garden, p. 175.

Tied aesthetically to stones and rocks are sand and soil. Lawns were seldom used in Japanese garden design; instead, open portions were covered with raked sand or the earth was weeded, raked and then beaten. This beaten earth was then watered to stay damp, something that was particularly appreciated during the summer months for it cooled down the whole garden.

Generalife

Rocks and stones in their natural form have no place in the Islamic garden. They were valued only once they had been transformed by the hands of an artisan, which is an underlying concept of the architectural garden. Ceramic tiles though, were particularly appreciated as they could take any form, be glazed a wide range of colours and once glazed, their surface remains hard and shiny. The criteria for rock choice were bright colour, hardness, interesting texture, and rarity.

Shape Categories

Rocks were cut and clay tiles were formed into shapes that could fill a space and leave no irregular parts.

> The equilateral triangle, the hexagon and the square are the three plane shapes which will independently fill a surface without leaving any gaps. Each shape has its own archetypal behaviour in terms of itself and, in different ways, within its own matrix.[1]

The qualities of a triangle are inherent in a hexagon, the one divided becomes the other; and conversely either shape multiplied gives the other.

> Hexagons with their 'sixness' and six-sidedness can give rise to different smaller or larger patterns by surrounding each point with a smaller similar figure so that each has a common edge with its neighbour; this implies an indefinitely small and large growth system.[2]

The growth systems of the square can run off two axis, the one coming from the sides of the figure and the other forty-five degrees to it.

Non-regular forms such as stars, octagons, and lozenges were not simply placed on a background, but rather constructed so that the

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[1] Critchlow, Islamic Patterns, p. 26.

[2] Ibid.

spaces between made interesting shapes. There is a balance between the foreground forms and the background filler forms. The former can recede, and the latter come forward. The high colour and tone contrast of the tiles make for an ambiguous reading of positive and negative spaces, and hence lead to the reconstruction of the patterns.

The geometric forms used contain infrastructures which are the germs of the transformations and mutations of the patterns. The Islamic designer chose shapes that avoided stability and inferred movement while at the same time constructing an interlocking composite unity.

Placement of Tiles and Cut Rocks

The arrangement of the cut rocks, stones, and ceramic tiles in the Islamic garden is completely opposite to that of the Japanese garden. The Islamic gardener moves toward completeness. This completeness means the filling up of the voids of the design. The present stonework and ceramic work in the Alhambra is Christian, but greatly influenced by the original Arab work. With the artifacts presented by Bermudez Pareja after the fire of 1958 when Arab remains were discovered and with the evidence of similar structures of north African origin, it is possible to reconstruct the appearance of the Arab craft.

> What also became visible, in the N.E. angle, and at the same level as the tile work just described [post-Conquest polychrome tiles] was a small section of tile work, apparently older, made of tiny square tiles, glazed in white and black, in a checkerboard pattern.[1]

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[1]Pareja, "El Generalife despues del incendio de 1958," p. 28.

The tiles used for the mosaics that covered the walls and floors of the buildings of the Generalife and the pathways and canals of the gardens were made from an earthenware terracotta clay that was then whitened and finally coloured with bright lead glazes. The main colours were yellow, from yellow iron oxide; green from copper oxide and blue, from cobalt oxide.

The walls and floors of the buildings and the gardens were divided into square and rectangular units of varying sizes to frame textiles and rugs. The mosaic work on the walls falls into three distinct categories. The first is long bands or cartouches of written religious and propagandist texts. The second category is that of vegetal derivative designs. The vocabulary is limited to the forms of pine cones, acanthus and the palmette. This category, as well as the last category, geometric, were also evident in the garden. Regular geometric forms are presented either alone or as the background to the vegetal images. As a background they must keep a balance between positive and negative form. When presented alone, the geometric designs exhibit symmetry, which allows easy repetition in the composition; single units of composition that are small enough as to be unobtrusive, and units simple enough as to allow modifications, either linear growth or turning on edges or axis (see Fig. 11).

The configurations of the geometric category had their connection to the movements and forms of nature. This can be seen in the names given to the patterns by the Islamic designer. "Interestingly, these forms were given by the artisans such highly descriptive names

as sun, almond, lemon, rose, drum and bottle."[1]

Like all the other elements of the Islamic garden pattern was sanctified.

> Pattern like number, is one of the fundamental conditions of existence and is likewise a vehicle of archetypes. As arrangements both emerge from simplicity and unity and return towards it, they exhibit some fundamental relationships which become hierarchical.[2]

This fundamental hierarchical relationship in the tile patterns from center to point and back, is a metaphor for the separateness of God; his absolute distance from humanity, and for the omnipresence of God; his embracing of all humanity. By the evident structures and the infrastructures, the Islamic designer connects the garden to the intelligent pattern of all creation. The centerpoints never visible in the evident structures or the infrastructures if figuratively God, invisible but directing.

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[1] Encyclopedia of World Art, 19th ed., s.v. 'Islam,' by Ernst Kuhnel.

[2] Critchlow, Islamic Patterns, p. 24.

CHAPTER VI

PLANTS

Of the interior elements of these gardens the most conspicuous by its presence or by its absence is plant life. The use of plants in architectural and landscape gardens demonstrates the essential differences between them. Although religious conceits affected each of the garden types in the choice of plants, i.e. the rose as the tears of Allah or the lotus as the symbol of Buddha, the main choice of plants has to do with the appearance and structures sought by the gardener.

The landscape gardener is interested in plants in terms of the texture of the garden, and the appearance of naturalness and the changes that they undergo with time. This is not to say that the landscape gardener does not employ some very 'unnatural' constructions, but the issue for her/him is how well the techniques could be disguised.

The architectural gardener is not restricted by the necessity for natural appearance, but is tied to the demands of geometry, which are equally as demanding. The architectural garden resembles the kitchen garden and so benefits from the experience learned there about geometric planning of sunlight and irrigation distribution for optimum plant growth and a healthy appearance.

Entsu-ji

The ideal of the Japanese garden is "a space in which the art is so artless as to be unapparent."[1] To attain this, a variety of plants is used rather than one plant type which would stand out. The landscape garden avoids using exotic plants, or plants placed out of their natural environment. In this sense the garden of Entsu-ji is an exemplar of this aesthetic; the plants in the garden are reduced to simple types, moss, lawn, a varigated hedge, bamboo (hidden), cryptomeria, and Japanese cypress. These are all modest elements for garden design. The small garden consists of forty-five rocks, moss covered, sitting on a hummock. The hedge behind the moss acts as a trimming line for the garden. This is called 'sentai', pruning to allow more natural beauty to emerge. Behind and 'outside' the garden is the line of cryptomeria and Japanese cypress. These trees, more specifically their trunks, borrow the scenery that lies in the distance, Mt. Hiei. Not visible, but nonetheless present, is a bamboo grove that is situated between the cryptomeria and the hedge. Its presence is audial in that cicadas sing throughout the summer and autumn (see Fig. 32).

Sections of the Sakutei-ki dealing with trees, illustrate the importance of Shintoist roots in garden design. "... and the gods descended from Heaven to trees ... therefore the dwellings of humans should have trees in their gardens."[2] Within Buddhism as well, the mythology of the tree is important as Buddha had all of his visions under a tree.

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[1]Masao Hayakawa, The Garden Art of Japan (New York: Weatherhill/Heibonsha, 1973), p. 9.

[2]Rambach and Rambach, Sakutei-ki, pp. 246-247.

As far as planting is concerned the Sakutei-ki treats carefully the bad omens of certain planting practices.

> It is not good to plant 'sakaki' (divine trees) in the middle of a garden because 木 tree, in the middle of 囗 frame, signifies 困 distress.[1]

The Japanese gardener does not use exotic or rare plants as they are not images that he/she understands. From early times, there has been criticism of any ostentatious elements in a garden. Although each element may be worthy of study or contemplation, this must not supercede the integration of the separate elements of a garden. It is in this context that Roger Cailloix wrote:

> ... le jardinier, contrairement à l'artiste, n'ajoute pas un objet, une oeuvre, aux données de l'univers (mais) transforme un arpent de la nature.[2]

Texture and Irregularity

The emphasis of this transformation is the texture of the image, the tantalizing line that it runs between source and ideal, nature and the methods and restrictions used by the gardener. Unlike the Islamic gardener who repeats over and over the same basic design with variety only in plant types through importation and cross-breeding, the Japanese gardener must not fall into formula solutions for planting and organizing the garden. Garden design, then and now, is a contemplative and spiritual as well as aesthetic exercise. The point of departure for each Japanese garden being its environment, each solution must be individual, demonstrating the gardener's sensitivity to

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[1] Ibid., p. 248.

[2] Roger Cailloix, as quoted by Barriere, "L'emotion que peut donner ...," p. 62.

the site. A solution for planting, no matter how well suited for one site and no matter how well it might be transferred to another, was not repeated, "since their gardens were regarded as means toward Zen discipline, copying was no doubt strictly forbidden."[1] The aim of the Japanese gardener is to construct a garden where the texture of the plantlife inside recalls, but is distinct from the plantlife outside. The viewer's eye must be drawn from the garden plants to the environment and yet be able to distinguish a transition. The trees and bushes of Entsu-ji distinguish the garden from its outside, and the mosses of the garden attach it to the outer environment.

Katsuo Saito and Sadaji Wada mention in Magic of Trees and Stones: Secrets of Japanese Gardening,[2] the various criteria for choosing moss in the landscape garden. Shady gardens like Entsu-ji are covered with hair moss, niawa sugi moss, cizan moss, mishiki moss, muki-chirimen moss and hikagen okasura. Of these, the favourite is hair moss (see Fig. 38). It is found in the pine groves of the mountains. Following it, the next two common species are hime moss and seitaka, which are not particularly well suited to shade. A number of very practical issues come into play in the choice of moss. Some are resistant to the action of the bamboo brooms used to clean the garden of unwanted leaves; hair moss, niwasugi and cizan moss cannot be swept. Hair moss, alone, grows too stringy, so often muku-muku moss is mixed with it to keep a clean appearance in the garden. Certain mosses are well suited to growing on inclines (e.g. hume and seitaka). Others

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[1]Masao Hayakawa, The Garden Art of Japan, p. 74.

[2]Saito and Wada, Magic of Trees and Stones, pp. 267-268.

grow well on the rocks but not on the ground cover, such as hika.

Hence the gardens are quietly orchestrated with a number of mosses so that there are no bare patches and yet there is no overgrowth. The different criteria for choosing plantlife by the landscape and architectural gardeners can be seen in the following two paragraphs. Subtle and flowing texture and irregular distribution are the leitmotiv of the landscape garden.

> Texture or at least some stimulus to the tactile sense, is an essential component of the 'landscape' garden, which must always be a three-dimensional construction and have an emotional as well as intellectual appeal. The appeal of the irregular garden must lie in its subtlety.[1]

Plants isolated by colour and form and distributed geometrically are the leitmotiv of the architectural garden.

> Plant distribution is also determined to a large extent by agricultural consideration, such as exposure to sun and proximity to irrigation sources, but the overall design of the garden, geometrical patterning, and division into symmetrical areas of vegetation can be seen as an architectural phase in garden development.[2]

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[1] Christopher Turnard, "Asymmetrical Garden Planning: The Oriental Aesthetic," The Architectural Review, Vol. 83 (May 1938), p. 246.

[2] Encyclopedia of World Art, 1959 ed., s. v. "Landscape Architecture: General Considerations," by Giulio Argan, p. 1066.

Generalife

Colour, Scent, Shade and Regularity

The architectural garden with its use of symmetry and patterning is very close to the kitchen garden and in the case of the Generalife garden the two are integrated into one garden. This is typical of the majority of Islamic gardens. The early gardens were filled with fruit trees and spice plants. The basic format of these gardens was an enclosed space delineated by a wall or a hedge. The ground was paved and the plants usually sat in parterres or pots. This made for better conservation of water, which was always at a premium in Islamic countries. The plants that flower were set in pots for accent. All the trees were potted to dwarf them. The potted plants were often set in the middle of a square of lawn for accent.

Over and over, the Islamic garden designers and poets write about the fragrances of the garden which was a major criterion of plant choice. The writings of Abul'l Khair, as quoted by John Harvey,[1] present a melange of poetic images and practical garden advice. He suggests that the garden space be leveled first to afford easy and even irrigation and that the trees be set out in straight lines. On the subject of trees, he recommends that entrances and areas around reservoirs, cisterns and pools be planted with evergreens because the leaves of deciduous trees could fall into the water and spoil its appearance or foul the water. The trees have as well the practical purpose of keeping the water cool and reducing evaporation. Lastly, the cool humidity of the running water may be accentuated by the

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[1] John Harvey, "Gardening Books and Plant Lists," passim.

fragrance of the evergreen needles. He differentiates between the various evergreens, for example, pine trees are appropriate for the centre of a garden because of their thick shade, whereas cypress, because of their beautiful form and the reduced footage they take up, and no doubt for their strong linear form, are suggested for bordering paths. The importance of trees that provide shade can be seen in the inclusion of shade as one of the delights awaiting the blessed,

> And as for those who believe and do righteous works we will cause them to enter gardens underneath which rivers flow, to dwell therein eternally; they shall have purified companions and we will cause them to enter abundant shade.[1] (Sura IV, verse 57, Qur'an)

In keeping with an established tradition in Islamic garden design, Abul'l Khair explains that a kiosque should be placed in the middle of the garden under a large shade tree and over running water to create a cool and private place to talk. As to the fruit and deciduous trees, he remarks that the heavy shade trees should be set in the north of the garden and the fruit trees toward the setting sun; this way those with heavy shadow can not overwhelm the garden and these lighter shade trees can let the last rays of sunlight through to the garden. Explaining his choice of trees and plants, he wrote and is quoted by Ibn Al Awam in his Book of Agriculture, "Know that there are trees which one plants for their fruit and others for their beauty, the perfume of their flowers and their splendor."[2] Contrary to the dictums of the landscape garden, Ibn Al Awam suggests that "evergreens and deciduous trees should not be planted together; it gives a

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[1] Dickie, "The Islamic Garden in Spain," p. 90.

[2] Fox, "Moorish Gardens in Spain," p. 15.

handsomer effect if each kind is kept to itself."[1] Clearly, the appeal of order and clarity is greater than the desire for naturalism.

Al Makkari, describing the Hispanic-Arab garden,[2] wrote that it was, "... filled with the most delicious fruits and sweet smelling flowers, beautiful prospects and limpid, running water, clouds pregnant with aromatic dew, and lofty buildings."[3]

The gardener, unlike other artists, is working with elements that risk being green and living one day, and dead and brown another, tamed for a period of time, but in the words of Robert Harbison, "never permanently subdued."[4]

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[1]Ibid., pp. 13-14.

[2]For plant lists, see Appendix II, 2.

[3]Fox, "Moorish Gardens in Spain," p. 12.

[4]Harbison, Eccentric Spaces, p. 5.

CHAPTER VII

WATER

In both Japanese and Islamic gardens, water plays a crucial role. The passion of the Arabs for running water has been explained as a relief from a hostile environment that had little rain and few rivers or lakes. Thus, in the Islamic consciousness, water is the oasis, water is a rare and precious commodity.

This causal explanation cannot be applied to the intense feeling the Japanese have for water. The Japanese environment is by no means arid, but they were aware that running water relieves the mugginess of their summers on audial and tactile levels. Probably, the sheer abundance of swift, short rivers and the dominating presence of the sea makes water, in miniature, a major theme in Japanese gardens.

Generalife

Water Metaphors and Islam

The sanctification of sensual water elements by Islam can be seen in literary metaphors. As mentioned earlier, rain was personified as the mercy of God. In the garden, the earthly fountain was associated with the heavenly fountain and by consequence represented the abstract principles of abundance and generosity, 'kauther' (Sura 98/8 9/72).[1] Likewise, 'rawda', the word for the tomb of saints and sheiks and garden was interchangeable. As the garden bore the same marks of Eden and Paradise, it was an intermediary between the memory of the first ideal dwelling place and the last, thus it was an intermediary between this life on earth and the next in heaven.

> ... the inscriptions in the room preceding this garden patio [Patio of the Canal] suggest a paradise, where 'the believers, men or women, are introduced into the gardens where clear streams wander', although the streams constantly flow, they are not like those of Paradise, for 'there they are eternal'.[2]

Often the dead were buried in the garden so they could continue to enjoy the sensual pleasures of the running water, shade and sweet fragrances on one hand, and on the other, so they would be directed and prepared for paradise. Thus the women of the household pouring fragrant rose water on the tomb was not an entirely symbolic gesture but was to work on an actual level.

> ... the custom of internment in a garden rests on an implied reciprocity between heaven and earth, a reciprocity whereby natural reality is plastically transformed into its supernatural counterpart.[3]

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[1] Arthur Arberry, The Koran Interpreted, Koran Sura 98/8 9/72.

[2] Pareja, "El Generalife despues del incendio de 1958," p. 27.

[3] Elizabeth B. Macdougal, The Islamic Garden, p. 91.

It is only the architectural garden with its imposition of religious structures on geometry and then geometry on nature that can function on this micro-macrocosm level.

Running and Still Water

Water is presented in two ways in the Generalife garden: running and still. The running water both of the Waterstaircase and of the small fountains are outside of the garden proper. In the Patio of the Canal the water is apparently unmoving. Water was brought from the upper reaches of the Darro River by a series of aqueducts, syphons and pumps to the Generalife garden and flowed from there to the water pools and fountains of the Alhambra. The most notable feature of this descent of water from one terrace to the other is the Waterstaircase, which connects the Garden of the Bride, dar al-'Anusah, to the Patio of the Canal.

The water runs down the hollowed out stair rails and down along the side or underneath the steps of the staircase. A system of taps at the top allowed for sudden spurts of water coming from under the steps or up from the landings of each flight. Visitors to the Alhambra after the Reconquest wrote of the playful effects installed to amuse sultans.

The source of the fountains in the Lower Garden is clearly Islamic. This particular presentation of water is linked to the royal Persian garden. It is in sharp contrast to the serenity and singularity of the Patio of the Canal. The Lower Garden is the noisy sheer delight of multiplicity. The whole is made up of numerous single units that are repeated, each contained in its individual

parterre (see Fig. 15). Although the walls and tiles of Generalife repeat the pious thanksgiving to God, God as the giver of all things, etc., the fascination with fountains and what they represent should almost be impious. Humanity, instead of remaining the humble and grateful recipient of God's graces, takes the place of God and sets about to create rain and defy gravity, not once but over and over. These fountains would never be found in the landscape garden. It is part of the proposition of the architectural garden that humanity should create structures to direct and contain water, put it under pressure so that it can be opened and closed according to the whim or rationale of humanity. Efforts were made to reconcile this view of humanity in the garden as 'deus ex machina' and the Islamic view of human nothingness in the face of absolute god. The basis for this effort was the metaphor of the garden as paradise, whereby each technical tour de force proclaimed God's greater glory.

The major water element of Generalife is the pools of the Patio of the Canal. These canals now have only one axis and are filled by a myriad of water jets. In the original construction there were two transversal pools to form a water cross, but no fountains (see Fig. 7). At the transversal point stood a kiosque. This is in keeping with the form of the 'chehar bagh' gardens of Persia.

Oleg Grabar quotes poems written about the Court of the Lion, which he considers the sister space to the Patio of the Canal, where water is presented as a liquid solid. The surface of the water is relatively unperturbed by the wind in an enclosed garden; it is only the movement of a hand that can break the surface and disperse light reflection everywhere. The water was still but not stagnant, as the

water pipes below the water surface constantly renewed the canals with fresh water. As previously mentioned, the canals rose above the plant life, so few leaves would not fall in and rot. Oleg Grabar considers the pools of the Patio of the Canal to be compositionally static and the plants and trees are placed to reinforce that stasis. He traces the treatment of water in the Patio of the Canal and in the Court of the Lions from Biblical sources, which describe a pool of quicksilver in the court of Solomon. Unlike the water in the Court of the Lions, the water in the canals does not function as a metaphor for victory or royal power. Following Grabar's thought, it is possible to extrapolate that the water in the canals is presented almost on an alchemic level, the essence of liquid. The Patio of the Canal is,

> An abundance not simply of water but also of reflections, soft lighting and sound, that has brought in here and held: back there, a pleasant and fresh humidity, without rust, mold or spiders.[1]

The reflection of trees, plants and architecture in water was greatly appreciated by the Islamic gardener. Especially appreciated was the reflection of light and objects in the not quite still water. The importance of the intense Islamic reverence for water was illustrated by the thorough Christian destruction of pools, fountains or ponds whether religious or secular. After the Reconquest of Spain, public washing of hands, which was a ritual that preceded Islamic worship (ablution), was suspect. Christian orthodoxy reached such a height that transgressors risked having their hands chopped off.

Generalife water works, although saved were altered, especially

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[1]Pareja, "E Generalife despues del incendio de 1958," p. 22.

in the Patio of the Canal by the addition of water jets. This was important to the Christians as they, like the Moslems, had an architectural tradition in garden design and hence realized that each form was a symbol for a world view. As they found that view abhorrent, they had to change the physical form.

Entsu-ji

Although water is only present in Entsu-ji and other dry gardens such as Ryoan-ji on a very remote level, this does not mean that the presentation of water has not occupied a great deal of Japanese gardening. Like the Islamic gardener, the Japanese gardener presented water according to specific religious meanings. Unlike the Islamic gardener, actual water formations in the environment always influenced, and eventually became the dominant source of water imagery in the Japanese garden.

Water Metaphors, Taoism and Buddhism

According to Teiji Itoh, during the formative period for Japanese culture (the Nara and Heian periods),[1] the increase of wealth created an expanded bureaucracy. As Japan centralized, officials had to be sent out to remote provinces where they were impressed by dramatic and fantastic landscapes, particularly seascapes. The first gardens were then miniaturizations of these far-off lands that were sparked by nostalgia. The gardens were called 'shima' or island, indicating the central issue of water in their construction. The gardeners,

> created miniature versions of remote places like Tamatsushima in Kii Province, the beach of Sumiyoshi and the islands of the Seto Inland Sea, Shiogama and Natsushima. All these were places of great natural beauty, where the sea played a major role in the setting, and they were all quite distant from the capital city, Nara.[2]

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[1]Masao Hayakawa notes that as early as the eighth century there were references to garden ponds in the Chronicles of Japan, "Nihon Shoki", the emperor Keiko supposedly enjoyed a garden surrounding a carp filled pond; this was in the first century A.D.

[2]Itoh, Space and Illusion, p. 17.

With the rapid spread of Buddhism this tourist snapshot mentality was overlaid with religious images. Esoteric Buddhism brought from China several traditions concerning water. One was the belief that the world was supported by Mount Shumisen which itself was surrounded by islands. Depiction of this became the subject of the gardens; it was easily adapted to the asthetics already developing at the time. Another Buddhist structure grew from the tradition of the Blessed Isles, a beautiful place in the Western Sea, which attracted the good spirits. The aristocratic gardeners began to build representations of these islands to either seduce back the spirits, prevent them from going, or simply provide themselves with this kind of ethereal beauty.

The other major religious influence on the use of water in the gardens is Taoist. Taoist tradition stated that the world was divided into four areas, each ruled by a mythical creature; the east by the Blue Dragon, the south by the Red Phoenix, the west by the White Tiger and the north by the Black Tortoise. Each of the creatures then was given a special dwelling place in the garden. Hence there was to be a stream to the east, a pond to the south, a path to the west and a hill to the north. If this prescription were carefully followed then the garden would be auspicious. These religious conceits do not seem to have been well understood by the Japanese, as they reversed or confused the strictures, although all were carefully recorded and codified.

Zen Dry Garden

Three aspects of water play a part in the Japanese garden, the sensual aspect (the sheer pleasure of water); the psychological import

of water (the calm and stimulation of moving yet contained water) and the symbolic level of water (water in relation to rocks and plants as a metaphor for mutability).

Entsu-ji is an example of the apparent contradiction of Zen dry gardens, having the movement of water as one of its major themes (see Fig. 34). Zen gardens such as Daisen-in, where the gravel and rocks illustrate the movement of water, not a dried up river bed, or Joei-ji where stones represent a waterfall and other rocks represent islands (possibly the Isles of the Blessed of Esoteric Buddhism) give an idea of what Entsu-ji might have looked like. As previously mentioned, Entsu-ji was not conceived to be a moss covered garden, but neither was it strictly constructed to conform to the 'kare sansui' garden. It was constructed after the major dry gardens. Most Japanese writers refer to the more aesthetic and less spiritual aspects of Entsu-ji. Although the placement of rocks in the garden recalls that of Daisen-in and Joei-ji, they are much looser and it is possible to imagine that the decision not to clean the rocks of lichen and moss was not too radical.

CHAPTER VIII

CITY IN RELATION TO THE GARDEN

Generalife, Leading From the City to Paradise

Relationship of Garden Location to the City

The gardens of Islam were centred in the city rather than around it as were their counterparts in Japan. Gardens in the city were attached to private residences, mosques and palaces. In the residences, they would be contained within the inner courtyard, and consequently would be completely private spaces. The gardens in the mosques framed a water fountain which was used for the ritual washing of hands before prayers. Surrounding the fountain were orange and lemon trees that provided shade and fragrance.

The various gardens of the Alhambra-Generalife complex were to varying degrees accessible to the public. The different degrees of accessibility to the gardens reflect the double function of the complex as a pleasure palace and as a fortress. It was not that political instability inhibited the court from retiring to the country for the summer, but simply that the whole of Islamic life was centred around the city.

The Plan of the City

The immediate impression, on comparing the plans of a traditional Islamic city and a traditional Islamic garden, is of the dizzying.

'disorder' of the former and of the mathematical serenity of the latter. This difference is not surprising when we consider the different weighing of the 'ideal' and 'pragmatic' in the two structures. True to its Judeo-Christian antecedents, Islam draws a sharp line between earth and its imperfections, and the perfection of heaven. Obviously, tied to this is the concept of the garden as an ideal space. The city was not to rival paradise. A certain degree of humility was demanded of those still here on earth.

As Paul Wheatley mentions, displays of wealth excite the envy of the neighbours, thus landmarks are also de-emphasized, a landmark being by nature conspicuous. The city represents the pious and transitory state of imperfect humanity and the garden, the eternal symmetry and perfection of God's place: paradise.

The Islamic city is, with a few exceptions, walled. Thus, the division between the city and the surrounding area is well defined, in this sense the Islamic city is similar to the Japanese city. The city is divided vertically into districts by social activities. For example, the industry and commerce of carpet-making and the housing of the workers and owners associated with them, are all in the same section of the city. The upper and inner city is reserved for prestige activities, book binding and carpet selling, whereas the lower and outer city is reserved for dirty or smelly industries, pottery and tanning. The military and royal quarters are always separate from the city, and usually looking down on it.

Generalife Garden was a part of the royal and military complex of Alhambra and although the Lower Gardens were accessible to the citizen, the whole of the Generalife Palace must be interpreted as

a metaphor for the privilege of wealth and power. The Arab pragmatic space[1] is both hierarchic and sexist. The male's pragmatic space extends from his quarter to those of the neighbouring quarters, whereas a woman's is limited to her quarter, and the higher class she is, the more restricted her movements. In this context the garden as an ideal space is a direct parallel to the city. In the terraced garden of the Islamic Empire, the lower gardens were open to the public, the middle gardens for the males of the ruling family, and the highest, most remote levels were for the women and harem of the household.

In Generalife, the original public entrance opened onto the Lower Garden. This garden was open to the whole city. The Patio of the Canal was completely cut off from the Lower Garden and could only be entered by traversing a narrow staircase and gallery; it was not open to the general public unless by invitation of a member of the royal household. The entrance to the Patio del Cipres de la Sultanas had yet again a more complicated series of staircases and turns (see Fig. 1). Here access was even more restricted, including only the women and certain men of the royal family.

The Islamic image of natural elements is contradictory. Nature is viewed as hostile: blazing sun, dry desert and demons lurking behind rocks or as the final expression of luxury: shade trees, sweet blossoms and scent and running water. The garden and the city are viewed in a similarly contradictory fashion. Life is centred around the city and summer residences in the country are not common. Thus the garden is the main contact with nature for the city dweller.

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[1]Wheatley, "Levels of Space Awareness," p. 354.

Yet the garden is only beautiful during the summer. The plants and flowers in Generalife turned brown or died off in the winter and only in the spring would they burst forth. The court would then move to the Alhambra Palace where the gardens had few living elements. The few there were, were subtle evergreens. On the one hand, this migratory movement with the seasons is an intimate union with nature; on the other hand, it is a denial of half of the seasons as winter planting was not considered a possibility.

For the Islamic citizen the effective organization of space perception is religion. As Wheatley points out, the Koran was written in a city, for city people, and it was in the cities that Islam first had its impact. The religion had prescriptions for every aspect of life, from birth to death. Every male, rich or poor, joined together in prayers that broke the day into regular repeated units. This kind of communal affirmation of basic religious truths is clearly a city phenomenon. The valourization of the city was structured in the "Hijrah" (Adoption of the Faith). In the beginning years of Islam, the city was the only place for communal prayer. The Koran and subsequent sacred books all sanctify the urban hierarchy with its intermingling of spiritual and political activities.

Religion binds the garden to the city on three levels: first, the form of the garden is almost required to follow an architectural mode, as architectural elements reinforce the sanctification of the city. Second, the garden, like the city, reiterates the fundamental Islamic beliefs.

> ... the walls are covered with pious and religious sayings. In religious and semi-religious texts plants and trees are figured in constant worship of Allah. Not one element in

> the garden does not have some religious significance. But at the existential level the inclusiveness of Islam, which renders all man's social responsibilities religious in character and which does not distinguish between duty as believer and duty as a citizen, invest each institution and its material expression with a quality specific to the Moslem world.[1]

Third, the garden acts as a stepping stone between the pious disorganization of the city and the perfect symmetry of God. At the same time sanctifying the social order and particularly the place of the royal family who hold within their confines the stepping stone to paradise.

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[1] Encyclopedia Britannica, 1980 ed., s.v. "History of Spain," by Juan Vernet Gines, p. 419.

Entsu-ji, Leading From the City to Nature

Relationship of Garden Location to the City

There are two circles of temple and shrine gardens in Kyoto with the imperial palaces as their centre (see Fig. 52). They are permanent witnesses of the suburban impulse of the citizens of Kyoto. From the beginning of Kyoto, rich and noble families have been building retreats from the city that remained within a short distance of the city. With the fall of dynasties these were absorbed into the city or converted into Buddhist temples. To see the Japanese impulse to create landscape gardens only as a function of the city dwellers romanticising the simplicity and freshness of country would mean ignoring their strong spiritualization of nature. Unlike the mosque, the centre and focus of the Islamic city, the shrines and temples of Japan are on the outskirts of the city. They remain when the villas of the wealthy have disappeared. The Japanese city and the Zen garden are directly opposite the Islamic city and garden on the balance of order and disorder.

A comparison of the plans of the city and the garden illustrate the basic raison d'être of landscape garden. The grid pattern of the city is a metaphor for power, while the irregular and natural elements of the landscape garden concerns the retreat from the problems of power. While the city is about the knowable and containable, the garden is about the unknown, a journey of contemplation through the void. The undirected and uncentred pattern of the Islamic city is a metaphor for non-power in the face of almighty God. Whereas the intelligent and knowable pattern of the garden is a metaphor for power, as it is a signal to and a replica of God's perfection.

Plan of the Capital

Both Kyoto and Granada were founded within the same century. In comparison to Granada, Kyoto was a completely planned city. In 794, the Emperor Kwammu ordered the removal of the capital from Nagaoka to a site just five miles away, that was named Heian-ko which means 'Capital of Peace and Tranquility' otherwise known as Kyoto. Ponsoby-Fane mentions three possible reasons for the move from the barely ten-year-old capital of Nagaoka. The most dramatic of the three concerns the rough spirit, or 'aramtama' of the executed brother of the Emperor. The hapless Sawara-shinno had been starved for a period of ten days and was finally strangled to death. His spirit, angry at this undignified end, was believed to be haunting and damning the capital. A more political reason was a power struggle around the throne. The losing side had supported the Nagaoka site, but construction of this capital had been effectively thwarted. Certainly, once the move had been made, the construction went on much faster. The third factor for the move is geographical and practical, that is, the water supply of Nagaoka was defective and could never have adequately supported the capital. Another reason for the choice of the new site was its magnificent views. Ponsoby-Fane points out that the Emperor was a man with a great interest in beautiful scenery. As Kyoto was not far from the old capital, the old buildings were easily dismantled and shipped to the new site.

The exact choice of the site of the city and its orientation was decided according to the principles of Chinese geomancy, which can be described as "an aesthetic science dealing with the positive management of the landscape in accordance with hidden forces within

the earth."[1]

> Heian, like its predecessors Nagaoka, Heijo (Nara), Naniwa (Osaka), Fujiwara and Otsu, was a city laid out symmetrically on the plan of the old capital of the Sui Dynasty of China, Ch'ang-an-fu .... The salient feature was a large broad road (20 in the plan) leading south from the main palace gate and dividing the city into left and right Capitals (Sakio, Ukio).[2] (See Figs. 53 and 54).

The right and left Capitals were not defined from a point of view south of the city, as they would be on a Western map, but rather from the palace which sits in the northern section of the city. The city faces south in accordance with the buildings of the Imperial Compound. The Imperial Compound faces south so that the emperor may always face toward the light and warmth of the southern sky. The city was divided off into regular square units that were defined by roads that ran north-south and east-west. These units were called 'cho'; they were approximately four hundred feet square. The palace, the most imposing landmark in the city, took up one-fifteenth of the surface area of Kyoto. The four boundary roads were lined with canals called 'kawa'. As well, there were six, not quite evenly spaced, north-south rivers and canals. The water for these canals was drawn from two neighbouring provinces, Atago and Kadzuno.

Not long after its construction, the water supply became a problem for Kyoto as well. Japanese chronicles are filled with accounts of ponds of the rich drying up in the summer. Only the imperial gardens seem to have remained functional throughout time. The market places were placed symmetrically, one in the east and the

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[1] Bring and Wayembergh, Japanese Gardens: Design and Meaning, p. 3.

[2] Ponsoby-Fane, Kyoto, Its History and Vicissitudes, p. 14.

other in the west and supposedly all transactions took place there, so that they could be controlled by the government bureaucracy. The shinto shrines and Buddhist temples were each alloted separate sections of the city.

Japanese Perception of the City and the Garden

The palace, like the city, was axial, symmetrical and hierarchial. The placement of the buildings with the exception of the front gate was visually quite static. The front gate was a self-conscious imperfection to remind humanity of its humble position and to avoid arousing the jealousy of the spirits. The status of the building was invigorated by the seasonal and cyclic changing of ritual activities, both religious and imperial. Events serve as the dynamo of the imperial complex.[1]

The relation of the palace to the rest of the city was based on a closed system of increasing restrictions as one approached the palace compound (Daidairi) and its divisions and various gates to the Kokio, the imperial residence, the 'inner interior' and finally, the two sacred halls, Shishin-den and Seirio-den. Kyoto was a closed and contained city and the distinctions between the interior and exterior of the city were retained, even when they did not correspond to the actual distribution of the population (see Fig. 55).

On a more intimate level, the houses of Kyoto, like those of the traditional Islamic town, backed onto the street, and were centred on the patio, but here the similarity ends for the architecture is open to afford an intermingling with the street. Like the Islamic city,

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[1]Ibid., p. 14.

this intermediary space is defined by activity; it is not a static delineated space, but changes with moments of celebration to those moments of the mundane chores of laundry and cleaning.

The Japanese city is the direct correspondent to the Islamic garden; both are built on the plan of a higher order. The reason that the Japanese city and not the Islamic city follows a celestial plan is also possibly that the spiritual and political head of the Japanese was one and the same, the emperor. His horizons were sufficiently wide that he did not have to settle for the visual affirmation of his godhead in a mere garden, but could command a whole city, and he was not in direct competition with an anthropomorphic supreme being.

CHAPTER IX

BUILDINGS AND THE GARDEN

Entsu-ji, Building Flowing Into the Garden

Although the Zen garden in general and Entsu-ji in particular have been presented as a landscape garden, it does not negate the role of architecture in the garden. The intimate and interdependent relationship between the garden and the architecture surrounding it is a major element of the Japanese garden. Geoffrey and Susan Jellicoe write: "House and garden interlocked, but were complementary in as much as the one was asymmetrically geometric and the other organic."[1] Gardner even further elucidates:

> House and garden in Japan form a single aesthetic unit, the spreading verandas of the building merging gradually into the garden and the architectural style of the house seeking to harmonize closely with the surrounding garden.. So closely felt is the relationship that the Japanese word for 'home' is written with two characters 'house' and 'garden'.[2] (See Figs. 44, 45 and 32)

Tunnard writes of an occult balance that is not a blending but an interplay of fore and background, of height and depth, motion and rest. Thus he notes that the interrelationships of garden and architecture does not mean that they meet. Plants do not cluster at the foundations of the

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[1]Jellicoe and Jellicoe, The Landscape of Man, p. 85.

[2]K. B. Gardner, "An Introduction to Japanese Gardens," Architectural Review, Vol. 119 (February 1956), p. 128.

house covering it up, the integration remains always on a restrained level.

Hirotaro Ota presents the veranda as the link between the garden and the architecture:

> The veranda seems part of the outdoors when seen from the inside, but looks like part of the house when seen from the garden. It plays the role of connecting the garden with the interior house. The whole wall space between the columns from the floor up can be opened, so that the veranda links the floor of the house with the ground outdoors.[1]

View

The byplay between these two, garden and architecture, is based on the emphasis of solitary and often static viewing of the Japanese garden. The garden was visually divided according to the views from the major rooms of the adjoining building.

The light, low and open construction of Japanese architecture, its lack of compactness (which can be seen in the division of the building into block sections that join each other on the diagonal) and its lack of symmetry, were all elements that made for integration with the garden (see Fig. 24).

The Sakutei-ki, which defines solutions to architectural design problems, does so in terms of lucky or unlucky omens. The traditional Japanese resistance to centrality is thusly explained: "One must not place the residence in the middle of the land, for the man living there will live there like in a prison."[2]

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[1] Hirotaro Ota, Japanese Architecture and Gardens (Tokyo: Kokusai Bunka Shinkokai, 1966), p. 24.

[2] Rambach and Rambach, Sakutei-ki, p. 248.

In terms of the temple garden of which Entsu-ji is an example, the garden size was considerably smaller than the imperial or private pleasure gardens. The principle room of the temple was a reception room with a small altar called the Hoji (see Fig. 31). This room was in the section of the compound that was the abbot's residence. The view of the garden from this important room illustrates the intense meditative aspect of the garden in Zen (see Fig. 25).

Early in the development of Japanese architecture, a modular unit was established as half the distance between the columns. The door height was also established at 5.7-5.8 Japanese feet (which is approximately the same as our feet) (see Fig. 30). Thus all the rugs, panels and screens had a standard size. Thus the outside panels all corresponded to the units established in the interior.

> Since a Japanese building is basically a framed structure of columns and beams the wall has little structural importance, and therefore, very large openings can easily be made.[1]

There was a particular emphasis on horizontal lines in Japanese architecture. The ceilings were low and the only areas raised above the floor were the beds. This horizontality reinforced the links between the house and the garden because it echoed the lines of the landscape and the walls or fences.

Delineation

Architecture in the Japanese garden marks the extent of the garden. Although the lines of hedges, walls or fences are clear, they appear to be at one with the nature they are delineating, much like a

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[1]Ota, Japanese Architecture and Gardens, p. 26.

natural fault line. Architecture does not contain the landscape garden. The walls surrounding gardens are considered as part of the architecture (see Fig. 43), whereas the fences and hedges are considered as part of the garden (see Fig. 44), hence the former are designed by the architect and the latter by the gardener.

The earlier walls were constructed of mud and tiles. Later bricks and plaster were introduced. They were roofed with board or tiles. Although the walls reach the height of fifteen to twenty feet, and so are quite conspicuous in some gardens, their horizontal lines are on the one hand, integrated into the garden design, and on the other, integrated with the outlying landscape.

The fences are light and open and provide boundaries, not privacy. Often the natural grain is emphasized as the only visual pattern. This is done by rubbing the wood with sand and lifting off the softer wood. The use of worm-eaten wood, weatherworn planks, charred or axe-marked wood has been extremely popular. In its use of borrowed scenery, Entsu-ji strays from the proposal of the landscape garden to integrate humanity with nature. As the garden cannot be entered, the viewer is limited to a small range for viewing the garden. The limitations are imposed by the position and extent of the viewing platform, which is in turn limited by the divisions of the architecture. Thus there are two relatively static elements in the garden, the viewing platform and the borrowed scenery, Mt. Hiei. The garden is coordinated to link these two elements so that a massive mountain may reach and be reached by the viewer. In the photographs of the garden it is obvious that the views to the left and to the right of Mt. Hiei fade and the eye is drawn to the clarity of the design that frames the

mountain.

Although the garden is not contained by the architecture, the viewer is. The view is not completely static but is restricted by the limits placed on the viewer's body position. It is interesting that it is these same restrictions that distance the viewer from corporal and tactile contact with nature in the garden, that serve to intensify the visual and contemplative contact of the viewer-moss garden-hedge-trees-emptiness-mountain. If the viewer had free access to the space of the garden, this continuum would surely be broken (see Fig. 25).

Generalife, Buildings Containing the Garden

The form of the Islamic garden is dependent on the architecture surrounding it. The natural elements of plants, rocks and water are chosen and modified to conform to elements of architecture.

> ... the geometrical garden pattern of Europe and the Near East is, in a sense, an architectural extension of the house. Its lines are controlled by the architect's square and compass, all its elements shaped and modified by man's handiwork. The ground was leveled and terraced, not left in natural contours. Water lay in geometrical pools or was caused to fall in cascades or spurt in jets or spring from fountains, rather than remain as a natural stream.[1]

Containment.

Generalife is an example of the 'riadh', "jardin encadré d'architecture."[2] Georges Marcais explains this term:

> Le riadh est essentiallement un grand patio planté, un jardin intérieur. Généralement de plan rectangulaire, il est encadré de batiments sur ses quatres faces ou plus souvents n'en est bordé que sur les deux petits côtés. Ces batiments peuvent être précédés de galeries ou parfois ne comportent qu'une galerie, sorte de pavillon de repos d'où l'on peut, commodément assis, jouir de la vue de jardin.[3]

Generalife is surrounded by walls and buildings (see Fig. 5). At the two narrow ends are halls. One has a complicated inner court with doors opening to a second level or other parts of the garden and the other consists of a long hallway, a portico, and a mirador that looks out over the city of Granada and gives a reasonable view of the Sierra Nevada range. The garden is based on a rectangular plan but its

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[1] Kuck, The World of the Japanese Garden, p. 23.

[2] Albert Champdor, "L'Alhambra de Grenade," Les Hautes Lieux de l'histoire (Paris: Albert Guillot, 1952), p. 310.

[3] Georges Marçais, L'Architecture musulmane d'occident: Tunisie, Algerie, Maroc, Espagne et Sicile (Paris: Arts et Metiers Graphiques, 1943/1944), p. 404.

corners are not at right angles. The short northern end is not ninety degrees to the colonnades. Presumably this variation was some concession to the landforms although a number of Islamic gardens in Northern Africa demonstrate this not-quite-exactness. The dimensions of the garden are 48.7 x 12.8 m. Through one of the long colonnades there is a fine view of the Alhambra, this colonnade is broken by a mirador which gives a larger view of the inside garden and the surroundings. The other colonnade is on the upper side of the hill and hence is blind. If the viewer crosses to the other side of the colonnades and miradors he/she can look unto the enclosed garden, but can at no point integrate the outside view with the inside garden. The choice is between one or the other.

Walls Leading to the Center

Oleg Grabar wrote about the composition of the whole Alhambra, Generalife included:

> ... every part of the Alhambra exhibits two consistent features. The first is that every unit was an intentionally 'interiorized creation' to be seen, appreciated and used from the inside .... The other feature is the sensuousness of the forms, whereby walls, columns, ceilings, water, at times space itself, are not fixed constants and definite compositions but become almost alive with sinuous lines, and profiles, with moving surfaces or ornaments, and are endlessly affected by a changing and contrasting light. Only colour has been too eroded to be effectively analysed, although it was certainly present, perhaps even garishly so, in the past.[1] (See Figs. 9 and 10)

In a similar view James Dickie stresses that the Generalife complex was to be comprehended from the inside. The blank outside walls showed none of the internal divisions of the palace. The view from

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[1]Grabar, The Alhambra, p. 209.

the central kiosque with its eight walls and respective windows must have demonstrated the garden's structure on a conceptual level (by turning inside the kiosque the viewer would be presented with a canal, a diagonal view of the garden, then another canal, etc.). Although visible from other viewpoints: the galleries, miradors or even the ground level, it is only from the kiosque that one is in central command of all the elements.

The sensuality of the walls and ceilings that Grabar speaks of act as an introduction to the main theme of centre. The galleries with their carved plaster and tiled walls and ceilings lead the viewer to the central kiosque, the perfect unadorned circle. There is no contradiction between the overcharged rooms with their colourful and sensual walls and ceilings, the exotic plant life and the pristine purity of the geometrical plan leading to the centre because each praises God, one through the senses and the emotions and the other through the intelligence.

CHAPTER X

CONCLUSION

I started this essay by posing the question about the relationship between the plan of a garden and changes to that plan that will inevitably occur. According to what plan is the garden created and maintained? I suggested that there are two methods of dealing with stasis and change in the garden, one is to turn to human authority and use a clear design with a simple meaning. The other is to turn to natural authority, the landscape, and there perceive natural solutions for creating stasis and assimilating change. I further suggested that those gardens that turn to human authority, have as their goal a linking up of terrestrial order and celestial order, and that inherent in this goal is a separation of humanity and nature. The second avoids the idea of celestial order, sees humanity as a part of nature, and seeks assimilation with the here-and-now of nature.

In the first chapter after the Introduction, I discussed the different space awareness engendered by the two environments. As Entsu-ji was modeled after the landscape, the changes in the seasons are incorporated in the garden as they would be in nature. During the spring, summer and fall, the mosses and most of the evergreens change in fine degrees of colour and lushness, and although Kyoto is cooler than Granada, the plants in Entsu-ji are still functional design elements in the winter when covered with snow. The design of Entsu-ji

accommodates voids, so that when snow falls or when the garden is lit only by moonlight, the structures and the voids shift. This is the constancy in change that is very clear in nature. Hence natural change becomes a kind of stasis.

The much different solution for seasonal changes in Generalife is to construct another garden, the Court of the Lion, Alhambra. In this, Generalife is representative of architectural gardens, where there is often a winter garden. Where the irregularity of the uncut cut rocks of Entsu-ji accommodate snow, the force and precision of the architectural design elements of Generalife are lost in the winter. The clipped plants present bare bones, rather than lush but contained rows, arches and planes. Winter wears holes into the fabric of the design that seeks completeness. In this instance the more static images of the garden require a seasonal change.

The sense of completeness that pervades Generalife is symbolized by the movement from the periphery to the centre. It is as much a function of the architectural solution as it is of Islam.[1] To enter the garden, the viewer passes through several rooms, each separate and

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[1] While a comprehensible geometric design is a hallmark of architectural gardens, the force and clarity of the design of Generalife is largely due to the particular character of Islam that emphasizes simple truths.

The structure of this essay corresponds to the proposition of two solutions to change and stasis in the garden, i.e. the landscape and architectural gardens. The division of the essay into chapters with headings that discuss the materials of garden making; water, plants and rocks, and the supporting structures of the gardens; the buildings and the city are set up to examine the choices the gardener made. The chapter on Religious Messages proposes a general view of the cultural context of the gardens. I have tried to credit the determining aspects of the culture on the design of the garden, but I have not examined them fully as they are not the main emphasis of this essay.

discreet, none suggesting the direction or form of the next, then the viewer enters the garden, which is very much like the other rooms. The viewer walks toward the kiosque, the centre, to complete the plan. Once in the kiosque the viewer is in command of the garden design. The conceptual centre is a point of delicate balance, if on the right periphery there is a canal, then there is a canal before, behind and on the left periphery of the viewer. The stasis of the design depends on a symmetrical balance.

The natural landscape surrounding the garden is seen only when the viewer climbs two flights of stairs and looks out from the frame of the mirador, past a precipitous drop, to the city, the city limits, the farms and finally the Sierra Nevada. The garden and the landscape cannot be seen at the same time. The architecture provides the stasis and the division of centre and boundary for establishing the view. The irregularity of the natural landscape is in the boundary excluded by the circle with its imaginary centre the kiosque. The passage from the outside in to the garden of Generalife is a movement from one static and symmetrical space to another.

The city sits somewhere between the centre of the garden and the excluded boundary of the natural landscape. Its disorder is not the apparent disorder of natural growth, it is a self-conscious humility, a deliberate avoidance of order. Yet its disorder is an important part of the movement from the periphery to the centre, for while it does not bear the marks of Paradise, it does hold within its walls the mosques, the true centres for communal worship. The ordered garden and the disordered city are two expressions of the same meaning, that this world is infinitely imperfect in the face of the singular perfection

of God.

A cosmic plan and the concept of movement to the centre is evident in the construction of Kyoto. Again the cosmic order corresponds to a religious and social order, but the landscape gardens were geographically and religiously separate from the capital. They were not integrated into a single movement from the periphery to the centre; instead they offered a different approach to spiritual experience. The sophisticated order of the Zen garden is in direct contrast to the 'completeness' of the Esoteric Buddhist plan of Kyoto.

The use of void is the keynote in the development of sophisticated order from apparent disorder and geometric order. In it voids and forms are both employed to create what Tunnard calls 'occult balance'.[1] If a line were drawn from the viewer who is seated on the viewing platform through the void of the tree trunks to Mt. Hiei then there would be an irregular balance of weight and form on either side. The form and movement of the rocks is stabilized by the hedge and broken by the tree trunks. Mt. Hiei, one of the static points of the design, is a natural element as concrete, irregular, and geometric as all of nature, while it too submits to the constant changes of growth.

The other static element of the view is the viewing platform. This leads to one of the contradictions of the concept of the landscape garden. Entsu-ji cannot be entered, hence the framing device for the view is not a natural, but an architectural formation. The whole 'shakkei' technique starts with the architecture as a departure point. The architecture provides the philosophical setting for the meditation

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[1]Christopher Tunnard, "Asymmetrical Garden Planning," passim.

that brings the mountain into the garden. It is arguable that to reduce the dichotomy of humanity and nature (the expressed purpose of the landscape garden), the extended eaves and verandah (both architectural elements) provide the spatial setting for the flow from the building to the garden, to the mountain.

For the Japanese the mountain is a symbol of stability, consequently it is the touchstone for all the shape categories. Its real or abridged form acts as the backbone of the garden, holding a form while allowing the seasons to pass and the plants to grow, etc. The rocks in Entsu-ji strike the occult balance between the mountain-shaped rocks permeated with a sense of stability and those unstable rocks that represent flowing water, always changing.

On the one hand, this treatment of rocks is contradictory to the concepts of the landscape garden, in that they are standing in for water, they provide a stable image of a moving element and the stream begins and ends within the garden. Yet, on the other hand, it is up to the viewer to fill in the flowing water, to fill the void; it is up to the viewer to start and finish the stream and finally, for the viewer to contemplate the essential contradictions of mutability and immutability, as found in nature, where, for instance, the force of delicate plants can crack rocks.

It is the contained canals of real water of Generalife, that provide the most static image of water and again within this, there lies a contradiction. Below the placid surface of the four rectangles of water, there is constant movement as pipes constantly refreshing the supply. Yet, despite the human ingenuity of the plan, a breeze or touch of the hand can break the surface. The gardeners of Generalife

were certainly aware that jets or fountains are less vulnerable presentations of water than still pools, but they could not produce the same balanced tension. The four pools reinforce the static centre in the kiosque where everything is held temporarily in check.

Not wishing to make an exhaustive review in this conclusion of the relationship between stasis and change in terms of the different aspects of the gardens, I would like now to consider how these choices accumulate to give meaning to the garden.

The human authority in the Islamic architectural garden produced a plan that is essentially a spiritual lesson. This lesson has remained virtually unchanged for 1400 years. The spiritual truth of Islam, 'There is no God but Allah' and He is the creator, omnipotent omnipresent and omniscient, is realized in an enclosed garden, where the rectangular walls of the garden represent the earth and the four canals, its divisions; the octagonal kiosque, heaven, and the centre, God. Allah as the point is also the circle. From the centre point God embraces all of His creation. Both the plan and the meaning are hierarchical. Both are also static. The viewer can approach the centre or leave toward the periphery, the believer can approach the Godhead or fall from grace, but the order remains the same.

When the Islamic gardener turns to nature it is to find in the geometrical aspects of nature (vegetative and crystaline) a glimpse of the symmetry of the cosmos. In any discussion of the architectural garden several words with similar meanings surface: order, microcosm-macrocosm and cosmic. The root of the latter three, 'kosmos' (Greek)

means order, 'hence the universe as an orderly and beautiful system'.[1] Nature is a proof of the cosmic order, it is not a source though, because even at its geometric best, it is only a vestige of God's perfection.[2]

This is further supported by the relationship of the cosmos and the architectural element to two-dimensionality. The cosmos is an ethereal entity, associated with two-dimensionality as an escape from the constraints of three dimensions. The sphere of two dimensions is the sphere of intelligence. Yet it is by virtue of the concrete and static nature of the architectural materials (rocks, tiles and plaster) that a two-dimensional organization of the garden can contain plants and water and thus be the active agent for the religious lesson.

The excitement and control of the architectural garden is in the holding of a static symmetrical balance, a broken branch on the left throws off the design, a fallen leaf breaks the symmetry of the pools, the viewer must physically enter the centre to hold all in check. The completeness of the perfect design is both exhiliarating and temporary. It gives the viewer a taste of the power of symmetry, but it passes, either the symmetry is broken or the viewer must leave. Its power is the power of the cosmos. In the temporary balance lies the lesson that the viewer is still in the sphere of temporal imperfection.

The approach to spiritual truths in Entsu-ji is very different from that of Generalife. The garden design is a form for spiritual

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[1] The New Webster's Encyclopedia Dictionary of the English Language, 1971 ed., s.v. cosmos.

[2] Seyyed Hossein Nasr, Foreword to Islamic Patterns, by Keith Critchlow, passim.

discipline. It does not bear the marks of a cosmic order. The spiritual truths are interiorized not exteriorized. The concept of spiritual discipline has the effect that no two gardens have the same plan, each must start afresh with the givens of the natural site.

The viewer does not complete the plan of the garden physically, but spiritually. The viewer enters by the voids and irregularity of the garden. By doing so the viewer begins an inner process.

The meaning of Generalife occurs when the body is led through rooms, up stairs, into the garden, when the viewer walks on a universal map, and entering the centre, the viewer has a glimpse of the spiritual lesson.

The meaning of Entsu-ji begins when the body stops and the mind is disciplined to continue the movement through the voids to an integration with nature.

Whatever the significance of the experience of these gardens -- all gardens -- provide solitude, solace and delight for the visitor. We are excited by the natural element they contain, however it is approached, and they do not involve the dangers or most of the discomforts of nature.

> ...we replace the world with our ideas of it, gardens being intermediate enough to make us think they are nature and not simply embellishments of it, regions which unlike paintings let us forget there is anything beyond.[1]

It is pertinent for me, as an artist, to examine the choices made by these gardeners, and how they have accumulated to give meaning to the gardens. Separated as I am by culture, time and geography, I see

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[1] Robert Harbison, Eccentric Spaces (New York: Avon Books, 1977), p. 3.

myself as the gardener. It is a joy for me as a lover of gardens to experience, imagine and create these places of solitude, solace and delight.

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APPENDIX I

Chapter I, page 8.

La casa es jardin y el jardin, casa. El jardin ... se acota y se limita como una estancia habitable cuyo techo es el azul.

Chapter II, page 22.

Le royaume d'Andalousie (qu'Allah très Haut le conserve!) s'étend sur une longeur de dix journées et sur une largeur de trois journées ... [Grenade est] la capitale actuelle du royaume et la cité la plus considerable du pays. C'est une grande ville de forme circulaire, les jardins, les fruits y abondent; elle est peu exposée aux souffles du vent qui n'y parviennent que rarement, car elle est entourée de tous côtés par les montagnes. Ses eaux ont leur origine dans deux rivières importantes, le Xenil et le Darro; le Xenil descend du Mont-Soleir au sud de la ville; c'est un pic élevé d'où la neige ne disparait jamais, été comme hiver, et qui par consequent, est très froid: il en resulte que Grenade l'est aussi en hiver, car elle n'en est eloignée que de dix milles. A propos de la température froide de Grenade, Ibn Sadra a dit: 'Il nous est permis de négliger la prière, dans notre pays, et de boire le vin, chose interdite, pour nous refugier dans le feu d'enfer, car il nous sera plus doux de souffrir que le Soleir, et le plus clement'.

page 28.

A la vista de la Alhambra y casi de la frontera cristiana, no podia faltar junto al cenador central del jardin persa cerrado, el mirador abierto al paisaje, que nos ofrece en el costado de poniente la mas fiel evocacion del Genneralife rural y exquisito de la Edad Media, no solo por la vision de conjuntos urbanos de tanto sabor medieval como la Alhambra y el Albaicin, que casi ocultan todavia las nuevas construcciones de Granada, como por ese contacto immediato con las huertas que forman un primer termino, sin el recurso embellecedor de jardines modernos y carreteras e instalaciones para el turismo.

page 28.

Los bienes cuantiosos de la corona de los reyes islamicos granadinos les permitiria tener acomodadas las almunias o fincas rurales de su patrimonio, para gozarlas como casas de recreo en las que poder alojar a los personajes que venian a Granada, o para vigilarlas placenteramente cuando convenia a las labores o a la recoleccion, o simplemente para ejercitar, en cierto modo, los habitos nomadas que el islamismo difundio y que a veces parecen reflejados en el simple deporte de trasladarse du una a otra finca por puro placer o en estrategicas huidas.

Chapter IV, page 61.

En Ibn Luyun encontramos el esquema que pudo inspirarlo: "Debe haber un cenador, en el centro del jardin para los que reposen en el, que mire a todos los contornos, de tal manera que el que entre, no oiga lo que alli se hable, nillegue nadie inadvertido. El cenador debe estar rodiado de rosales trepadores y arrayan y de todas la plantas que adornan un jardin. Este sera mas largo que ancho, para que la vista se explaye en su contemplacion."

Chapter V, page 69.

Vous devez placer les pierres en respectant les caractéristiques topographiques du jardin et l'aspect de l'étang.

page 70.

Vous devez aussi exprimer le 'fuzei' qui puisse rappeler un site naturel en conservant aux pierres leur aspect original.

page 70.

Ajoutez les pierres secondaires selon le bon assemblage. Il faut choisir les pierres principales avec les arrêtes vives (pierres de montagne) et de grandes dimensions. Il faut arranger les pierres additionelles suivant les exigences de la pierre principale. D'une façon générale vous choisissez des pierres qui ont un beau sommet même pour les pierres additionelles. Si seul le sommet de la pierre principale est beau cela n'a pas d'importance car les défauts du corps seront cachés par les autres pierres.

page 70.

Tambien aparecio en el angulo NE., y al mismo nivel de la soleria descrita, un pegueno resto de una soleria, al parecer anterior, de losetines cuadrados, con vedrio blanco o negro, colocados en damero.

page 81.

... et les dieux du Japon descendirent du Ciel sur les arbres ... les résidences humaines devront donc avoir des arbres dans leurs jardins.

Chapter VI, page 82.

Il n'est pas bon de planter des 'sakaki' (arbres divins) au milieu du jardin, car 木 arbre, au milieu de 口 signifie 困 être en detresse.

Chapter VII, page 89.

Sin embargo, las inscripciones de la sala que preside este patio-jardin, sugieren en el un paraiso en el que "los creyentes y las creyentes son introducidos en jardines por los cuales se deslizan claros arroyos," aungue estos siempre fluyentes, no sean como los del Paraiso, porque "alli seran eternos."

page 92.

Un caudal no solo de agua, sino tambien de reflejos, de luces tamizadas y de sonidos, por lo que la humedad alli atrae y retiene, porque es humedad alegre, fresca, sin mohos ni aranas.

Chapter IX, page 108.

Il ne faut pas non plus mettre la résidence au centre du terrain, car l'homme y vivrait comme en prison.

APPENDIX II

The following is a translation by James Dickie of a poem by Ibn Luyun. He was a poet of Granada in the fourteenth century and the description of the garden resembles remarkably the Patio of the Canal of Generalife:

With regard to houses set amidst gardens an elevated site is to be recommended, both for reasons of vigilance and of layout;
and let them have a southern aspect, with the entrance at one side, and on an upper level the cistern and well,
or instead of a well have a watercourse where the water runs underneath the shade.
And if the house has two doors, greater will be the security it enjoys and easier the repose of its occupant.
Then next to the reservoir plant shrubs whose leaves do not fall and which [therefore] rejoice the sight;
and, somewhat further off, arrange flowers of different kinds, and, further off still, evergreen trees,
and around the perimeter climbing vines, and in the centre of the whole enclosure a sufficiency of vines;
and under climbing vines let there be paths which surround the garden to serve as margin.
And amongst the fruit trees include the [common] grape-vine similar to a slim woman, or wood-producing trees;
afterward arrange the virgin soil for planting whatever you wish should prosper.
In the background let there be trees like the fig or any other which does no harm;
and plant any fruit tree which grows big in a confining basin so that its mature growth
may serve as a protection against the north wind without preventing the sun from reaching [the plants].
In the centre of the garden let there be a pavilion in which to sit, and with vistas on all sides,
but of such a form that no one approaching could overhear the conversation within and whereunto none could approach undetected.
Clinging to it let there be [rambler] roses and myrtle,

likewise all manner of plants with which a garden is adorned.

And this last should be longer than it is wide in order that the beholder's gaze may expand in its contemplation.[1]

Certainly the Andalusian peninsula did not lack in aromatic plants. Al'Mesudi, in Golden Meadows, listed the following aromatic plants of Andalusia: spikard, clove, gilliflower, sandlewood, cinnamon, calamus, aromaticus or caloris, mahleb and other perfumes, saffron, amber, costum, gentian and myrrh.[2] As this book was contemporaneous with the construction of the Generalife garden, this list gives us a good idea of the basis for plants in the garden.

Twenty common plants were listed in al-Badi-fi wasf al rabi by Himyari: myrtle, white garden jasmine, yellow wild jasmine, narcissus (Pheasants Eye), violet, mauve stock, yellow wall flower, trumpet narcissus, red rose, white lily, blue iris, water lily, almond-blossoms, margerite or cammomile, poppy or red anemone (the translation is not clear for these two), bean-flower, ivy-flower, garden pomegranate blossom and wild pomegranate blossom.[3] James Dickie refers to Pérès for six more plants: basil, lavendar, orange blossom, carnation, marjarom, and oleander.[4] Dickie himself adds twenty-three thyme, mint, saffron, lupine, lemon tree, laurel, vine, palm, cherry tree, pear tree, plum tree, mulberry, carob, banana tree, cypress, willow, medlar, quince, apple tree, colocynth, fig tree, mandrake and

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[1]Dickie, "The Islamic Garden in Spain," The Islamic Garden, p. 94.

[2]Fox, "Moorish Gardens in Spain," p. 20.

[3]Dickie, "The Islamic Garden in Spain," p. 104.

[4]Ibid., p. 104.