GARDENS OF RENAISSANCE
EUROPE AND THE ISLAMIC EMPIRES

Encounters and Confluences

Edited by Mohammad Gharipour
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The Pennsylvania State University Press
University Park, Pennsylvania
The publication of this book was supported by the David R. Coffin Publication Grant of the Foundation for Landscape Studies.

The Barakat Trust

The publication of this book was supported by a grant from the Barakat Trust.

Library of Congress Cataloging-in-Publication Data

Names: Gharipour, Mohammad, editor.

Title: Gardens of Renaissance Europe and the Islamic empires : encounters and confluences / Mohammad Gharipour, editor.


Summary: "A collection of essays exploring similarities between gardens and designed landscapes in Europe and the Islamic world after the fifteenth century. Essays identify possible direct or indirect influences and examine transcontinental mutual influences in garden design"—Provided by publisher.

Identifiers: LCCN 2017005890 | ISBN 9780271077796 (cloth : alk. paper)


Classification: LCC SB466.E9 G376 2017 | DDC 635.094—dc23

LC record available at https://lccn.loc.gov/2017005890
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Published in Korea
Published by The Pennsylvania State University Press, University Park, PA 16802–1003

The Pennsylvania State University Press is a member of the Association of American University Presses.


Typeset by Regina Starace
Printed and bound by Pacom
Composition in Minion Pro and Kievit
Printed on Hansol Matte Art
Bound in Dong-A
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The Renaissance was also an era of discovery for Europeans. As well as scientific discoveries and artistic innovations, an international network of trade, formed and established during the late Middle Ages, was utilized by European travelers. Their voyages had various purposes. While the Portuguese sought to establish new trade routes to India, the Moluccas, and Japan, the Venetians tried to maintain their control over the existing commercial channels. By contrast, the British traveled overseas to establish colonial settlements. Meanwhile, religious missionaries were sent from Rome to encourage and enforce conversion to Christianity. This exchange in the Renaissance is often seen with a Eurocentric bias, with historians failing to give sufficient credit to Eastern civilizations for their role in shaping this period in Europe. It cannot be denied, however, that political stability resulting from the powerful central governments of the Ottoman, Safavid, and Mughal empires facilitated and accelerated trade between Europe and the Islamic empires. The dynamics of political relations between these empires also played a significant role in shaping cultures in this region. Safavid-Ottoman wars motivated the British to send envoys to the Safavid court and to attempt to arm Safavid kings against their Ottoman rivals. The rise of Shi‘ism in Safavid Persia was partly a political gesture to unite that country, which was
ruled as a feudal system in the pre-Safavid Age, against Sunni suppression of Shi‘ites in the Ottoman Empire. Meanwhile, Safavid kings maintained good relations with the Mughals. Humayun, the second Mughal emperor, who was exiled to Persia, could only regain his throne with the support of Shah Tahmasp, the Safavid king. These friendly relations were enhanced by intercourt marriages, as well as exchanges in literature, art, and architecture. Despite differences in organization, structure, and rule, these Middle Eastern empires had many similarities. Vast developments in economics, culture, military, art, architecture, and garden design in these three empires as well as in Europe, especially after the sixteenth century, demonstrate that the Renaissance was more than a European phenomenon.

World history, however, was written primarily by Western intellectuals, with an inbuilt tendency to marginalize Eastern history. The same trend is visible in the field of garden history, drafted by American and European historians in the last two centuries. In comparison to studies of European gardens, the field of Islamic gardens is relatively young and still underdeveloped, partly due to the dearth of research on literary and visual documents and the underresearch of archeological sites and objects. All of this necessitates a new perspective on gardens, offering a more balanced approach that appreciates the diversity of traditions without prioritizing a specific garden typology.

Such an approach requires an understanding of the concept of cultural influence. It is often said that different cultures influence one another because of the contacts between them. Cultural contact is what occurs when two or more cultures interact with one another through creating a form of exchange promulgated by the media, trade, travel, migrations, or conquest. This process, labeled as “cultural diffusion,” describes the spreading of the cultural attributes from one culture to another. Cultural diffusion normally exists in one of three forms: direct diffusion, forced diffusion, or indirect diffusion. Direct diffusion occurs when two cultures are very close to each other, resulting in intermarriage, trade, and even warfare. Forced diffusion occurs when one culture conquers or enslaves another and imposes its own customs on the conquered people. Indirect diffusion happens when traits are passed from one culture to another through intermediaries, without the cultures involved in this mediated exchange ever being in direct contact. Compared to the indirect form of exchange, the first two kinds of cultural diffusion usually lead to more prominent impacts on the cultures that they engage. In these cases, the cultures in contact are usually classified as either dominant or subordinate. In either instance, cultural diffusion is a two-way street, and the culture of the dominant society is equally affected. This, in the long run, can lead the society to a multicultural environment where different cultures coexist and establish mutual interactions.

But how is this related to a discussion on garden design in Europe and the Muslim world? The study of Renaissance Europe indicates extensive connections with the Middle East and North Africa. Direct connections in trade and politics played a significant role in the development of gardens in both regions. However, while the Ottomans maintained a direct relationship with Europeans, especially the French, exchanging gardening concepts and plants, there are no documents confirming the official exchange of ideas between the Safavid and British courts. In other words, direct political relations did not necessarily result in influences or borrowings in garden design and horticulture. Nonetheless, it cannot be denied that printed travel accounts and sketches of gardens and urban landscapes must have familiarized European intellectuals with Eastern garden design. During this period, some simultaneous changes occurred in garden design in both Europe and
Persia. The role of gardens within cities also grew in prominence, with a gradual shift in gardens from the private sphere toward an increasingly public function. As a natural consequence of this shift, gardens began to serve as the core of new urban plans and designs. This development not only established a new relationship between the garden and the city, but also emphasized the garden pavilion or villa as the focal point of city planning. Are such concurrent developments in European and Islamic gardens the result of concurrent political and social changes in both regions, or could these garden design traditions have mutually influenced one another?

About This Book

Although indebted to previous studies that focused on specific regions, this book aims to highlight transcontinental cultural, economical, and political relations in the sixteenth and seventeenth centuries. Its main goal is to pinpoint similarities between gardens and designed landscapes in European and Islamic traditions, while identifying possible direct or indirect influences, and to examine transcontinental mutual influences in garden design after the fifteenth century between Europe and the Islamic world. Illustrating commonalities in design, development, and perceptions of gardens and nature more generally, this book’s chapters substantiate important parallels between the revolutionary developments in garden design in both regions, relating them to political, economic, and cultural changes within European and Middle Eastern societies.

While there have been occasional references to connections between so-called Islamic and Renaissance gardens in the last two decades, the leading paper exploring potential linkages between Islamic and Renaissance garden design was Lisa Golombek’s “From Timur to Tivoli: Reflections on Il giardino all’italiana” in 2008. Golombek synthesized the relevant facts, drawn from historical documents and her own site investigations of the Timurid gardens, to determine the origins of the Italian gardens. She identified those elements of the Renaissance garden that could not have derived from indigenous traditions in Italy, and further speculated on how they arrived and why they were adopted. Since that publication, the field of Italian Renaissance gardens has greatly expanded, and many of the questions Golombek dealt with have been given a new perspective.

The contributors to this volume study direct and indirect influences by comparing and contrasting the meanings and forms of gardens in the Islamic world and those in Europe; by exploring historical documents, art, and literature; and by comparing spatial and formal elements and concepts. The chapters are organized roughly in chronological order, moving across regions. The chapters by Paula Henderson and Ebba Koch, which previously appeared in other publications and have been revised for this volume, were selected not only for their scholarly and historiographical significance, but also for their contribution to enriching the methodological diversity of this volume by studying historic accounts and artistic traditions.

The book opens with an introductory chapter by D. Fairchild Ruggles that gives an overview of the historiography of Islamic gardens from the perspective of garden history. Dividing the discussion of Islamic gardens into four categories—literary themes, formal compositions, living environments, and cultural expressions—Ruggles stresses the significance of moving beyond regional boundaries. Exploring historical texts and travel accounts highlights the dynamics and nuances of the Renaissance in Europe and the Islamic world and how extensive relations between these two regions could have affected garden design.
In chapter 2, “Embracing the Other: Venetian Garden Design, Early Modern Travelers, and the Islamic Landscape,” Christopher Pastore studies the role Venetian travelers played in exporting and importing the knowledge of garden design between the Islamic world and Europe. He demonstrates how the wildly popular travel accounts of the day shaped the Venetian vision of a world, and how this wider world changed the way Venetians imagined their designed landscapes at home. Moving through a series of case studies, Pastore discusses Venetian encounters with the Islamic landscape, its built environment, and the magnificent gardens that captivated Venetians and subsequently influenced the refinement of Renaissance landscape designs and use of gardens in the Veneto. He surmises that after this exposure to tales of garden courts, cooling fountains, and ripe orchards across the Islamic world, members of the Venetian elite were encouraged to create splendid villas that partially reflected their experience of the Middle East.

Comparative studies of forms, spaces, and design elements of the gardens of Europe and the Islamic world shed light on potential influences between them. Simone Kaiser’s chapter, “Staging the Civilizing Element in the Gardens of Rome and Istanbul,” develops a comparative view of the aesthetic experience and the uses of water as a means of self-representation in the gardens of sixteenth-century Rome and Istanbul against the backdrop of the reception and appropriation of antiquity. Parallels between the Ottoman and Italian “Renaissances” help Kaiser highlight the growing importance of gardens after the fifteenth century. On the basis of several case studies, Kaiser identifies gardens as an important medium of international exchange at a time of ongoing political confrontation between Catholic and Islamic powers. She explains the use of water in both Italian and Ottoman gardens of the Renaissance in the context of the symbolic appropriation of land and sensual perception.

At the same time, history witnesses direct connections between Muslims and Europeans in terms of garden design. In “The Art of Garden Design in France: Ottoman Influences at the Time of the ‘Scandalous Alliance?’” Laurent Paya explains how Italian gardeners employed in French courts were gradually replaced by Ottoman specialists after 1495. Discussing the controversial “scandalous alliance” between France and the Ottoman Empire in the sixteenth century, Paya explains how these exchanges, which he places in the context of international politics, involved commercial transactions and the consumption of artistic objects and plants. Through his interpretation of historical records, he explores the travel of the French ambassador to the Ottoman Empire in 1547, the work of scholars whose writings included vivid descriptions of Ottoman gardens, and the potential effects of these descriptions on French Renaissance garden design.

Spatial aspects of gardens help us draw meaningful parallels between different garden traditions. In “‘For Beauty, and Air, and View’: Contemplating the Wider Surroundings of Sixteenth-Century Mughal and European Gardens,” Jill Sinclair consults sixteenth-century texts and images to explore the role of external views and vistas in early Mughal Indian and European Renaissance gardens. Often portrayed as enclosed and protected spaces, in reality gardens in both these regions increasingly offered views beyond their immediate confines, along with a sense of the larger landscape (whether natural or urban), as an essential part of garden experience. Studying Indian gardens in Delhi and Agra and European gardens around Rome and the Loire Valley, Sinclair reveals shifting relationships in both regions between the natural world, the garden, and the city, showing that gardens in the sixteenth century
began to symbolize the human taming of nature and his new confidence about his place in the world.

In “The Gardens of Safavid Isfahan and Renaissance Italy: A New Urban Landscape?,” Mohammad Gharipour studies urban developments in the first two decades of the seventeenth-century Persian capital city of Isfahan in order to clarify similarities between garden design in Persia and Italy. Comparing Chaharbagh Street in Isfahan with selected examples of villas and gardens in Renaissance Italy, he attempts to address the ways in which gardens became part of the urban fabric, how their social function changed from private to public, and how the gardens of Isfahan specifically were integrated with the urban layout and setting. Exploring historical evidence, Gharipour highlights changes in Persian gardens which coincided with analogous developments in Italy, focusing on the changing relationship between city and garden, development of irrigation and hydraulic technology, and spatial characteristics of gardens.

Paula Henderson’s “Elysian Fields Such as the Poets Dreamed Of: The Mughal Garden in the Early Stuart Mind” explores personal, diplomatic, and commercial contacts in Tudor and early Stuart England to find influences in garden design and horticulture. Diplomatic encounters with the Ottoman Empire resulted in knowledge of and a desire for the wonderful bulbs and exotic plants native to that part of the world; these quickly became the most sought-after status symbols. Focusing on the artistic interaction between the Mughals and the English in the late sixteenth and early seventeenth centuries, Henderson also investigates how English descriptions of Mughal architecture and gardens influenced the garden-making elite in early Stuart England.

In “Garden Encounters: Portugal and India in the Sixteenth and Seventeenth Centuries,” Cristina Castel-Branco explores the influences of the gardens of India on mid-sixteenth-century Portuguese Renaissance quinta gardens around Lisbon. These gardens were commissioned by the Goa viceroys and by the nobility who lived in India during the same period when the Mughals were establishing their empire and enriching each of their cities with chaharbagh gardens. Providing an in-depth analysis of the historical context of relations between the two cultures, Castel-Branco studies five historic gardens to show how elements and ideas from Mughal gardens have been transferred in gardens in Portugal. She explains that the historic connection between Goa and the northern regions of Mughal India played a significant role in introducing new elements and ideas in the design of gardens from 1520 to 1670.

Studying art can create a comparative framework in order to explore how gardens evolved as cultural landscapes in which various cultures merged, overlapped, and influenced each other. In “Carved Pools, Rock-Cut Elephants, Inscriptions, and Tree Columns: Mughal Landscape Art as Imperial Expression and Its Analogies to the Renaissance Garden,” Ebba Koch explains that an inclusive perspective on architecture and sculpture can result in meaningful parallels between Mughal and Italian Renaissance gardens. Koch shows how the Mughals enhanced nature with the artistic addition of rocks, grottoes, inscriptions, and tree columns sculpted out of marble. This Mughal form of landscape art, to which there is nothing comparable in the entire Islamic garden tradition, testifies to a deep engagement between the Mughals and the land of India, especially in their sympathetic use of nature. Without trying to find a direct link, Koch suggests that this marriage of nature and art is similar to the approach developed in the gardens of Renaissance Europe.
Addressing the idea of the “global Renaissance,” in his concluding chapter Anatole Tchikine explains the possible influence of Islamic irrigation techniques on Italian Renaissance garden waterworks, the international exchange of exotic plants during the Renaissance, and the acquisition of flowers via the networks of Florentine merchants in Istanbul and the presence of Turkish objects in the collections of the botanical garden in Pisa. Discussing gardens and traditions of collecting as a common practice in the East and the West, he concludes this volume by examining the notion of the “global” to emphasize the sixteenth century as a period of transition, when the world was continuing to open up even more and objects from the New World were beginning to compete with Islamic plants and artifacts.

As the contributions to this volume demonstrate, Islamic and European garden traditions interacted and influenced one another by various means, from exchanges of gardeners and horticultural or irrigation techniques to the indirect exchange of concepts and elements. Nevertheless, what remains central in these studies is the global impact of political and cultural changes that occurred after the Middle Ages, not only in Europe and the Middle East, but also beyond these regions in the Americas and the Far East. These shifts within societies and politics, regardless of their geographical location, resulted in cultural changes that significantly affected the way designed landscapes were perceived, created, and used. These parallels necessitate the study of the nature of reciprocal influences or mere confluences from multiple angles, and an appreciation of the complexity of cultures and politics throughout the world during the Renaissance.

In the end, it should be emphasized that this volume is an effort to provide thought-provoking analogies across regions and chronologies. The design and development of each garden in history, regardless of its location, are the outcome of complex overlays of contextual issues and processes, which cannot be explained by postulating “universal” stylistic movements. This volume is an effort to illuminate these complexities by underlining parallels and interrelated developments across regions. While using a comparative framework enables us to explore these similarities, it is important to realize that concurrence, antecedence, and contiguity are not always equivalent to the relationship of cause and effect. In this sense, the studies published in this volume attempt to raise questions rather than provide a cohesive narrative for influences, confluences, and connections between European and Islamic garden traditions.

NOTES

1. For more information on travelers, see Peter C. Mansall, ed., Travel Narratives from the Age of Discovery: An Anthology (Oxford: Oxford University Press, 2006).
2. It is said that numerous caravanserais were built in this era to facilitate trade on the Silk Road. More than a thousand caravanserais are attributed to Shah ʿAbbas, who wanted to make his empire the center of the commerce for merchants traveling between Europe and China. Similarly, Ottomans from their first capital, Bursa, provided opportunities for European travelers. In her study on the bazaar in Bursa, Özlem Köprülü Bagbancı explains that the Medici had a commercial agent in Koza Han, which shows the importance of the city. Bagbancı, "Commerce in the Emerging Empire: Formation of the Ottoman Trade Center in Bursa," in The Bazaar in the Islamic City: Design, Culture, and History, ed. Mohammad Gharipour (Cairo: American University of Cairo Press, 2012), 97–114.


5. Bisaha, *Creating East and West*.


9. In early studies of race relations, anthropologists and sociologists classified the response of the subordinate cultural group to cultural contact as follows: accommodation, whereby the subordinate group simply conforms to the expectations of the dominant cultural group; assimilation, a process by which the subordinate cultural group becomes indistinguishably integrated into the dominant cultural society and accepts its values and standards; competition, in which the subordinate group sets up its own values in opposition to the mainstream; and exclusion, where there is no room for interaction between the subordinate and dominant cultural groups. Marshall, *Dictionary of Sociology*.

ACKNOWLEDGMENTS

I first conceived this volume during my days as a graduate student at Georgia Tech. The idea grew out of many discussions with my late mentor, Professor Douglas C. Allen. He nurtured and cultivated my thoughts, and much of what I am today is thanks to his kind ministrations. He helped countless students and colleagues, and his loss is sorely felt by many.

My friend Stephen Caffey was very helpful in the early stages of this edited volume. We co-organized a panel at the European Architectural History Network at Brussels in May 2012, and, although the current volume took a slightly different direction, I must acknowledge the audience, presenters, and conference organizers for providing a context in which to discuss this topic. I must, of course, express my gratitude to the authors of this volume, who worked tirelessly on several drafts of their essays. During the preparation of this volume, I benefited greatly from my conversations with several scholars at Dumbarton Oaks, including, but not limited to, John Beardsley, Michael Lee, and Mirka Beneš. Their insights and comments have been very helpful in shaping my arguments. I should specifically thank Anatole Tchikine for his enormous support and encouragement and for patiently advising on the preparation of the final manuscript. Of course, none of these worthy scholars is responsible for any errors of commission or omission. Finally, I should thank John Morris for his help in copyediting, Meridith Murray for making the index, Ellie Goodman for her help in the publication of this volume, and my colleagues, James H. Holland, Jeremy Kargon, and Mary Anne Akers for their continuous support of my research. I am also very grateful to the Foundation for Landscape Studies and the Barakat Trust for providing support for this publication.
GARDENS OF RENAISSANCE EUROPE AND THE ISLAMIC EMPIRES
The gardens and landscapes studied in this volume are presented within a comparative framework that has been rare in landscape history. The history and form of European gardens are very well studied, and the field is rich with studies of individual sites such as Versailles, Villa Lante, and Hampton Court, as well as more expansive surveys of important periods and landscape ideas that look at landscapes across regions and across the European continent. Islamic gardens, too, have been relatively well studied in recent decades, but almost always within a well-defined Islamic context. Although comparisons have been made between gardens of the Timurids (1370–1506) and Mughals (1526–1858), and between al-Andalus and the Maghreb, they have typically adopted a diachronic perspective in which effect occurs through time, in the sense of an original design concept that is transmitted forward, or—in survey texts—as expressions of a pan-Islamic cultural form inflected by regional variations. Rarely are Islamic gardens examined in dialogue with gardens to the east or west. To some extent this is understandable, since gardens, rooted in specific places and environmental contexts, cannot travel across long distances as portable objects can. Porcelain, silk, and paper—all imported from China into the Islamic world—were new materials that required technical knowledge, which was carried in the minds and hands of skilled artisans. But a garden belongs to its region: the plants grow according to the available hours of sunlight, seasonal temperatures, availability of water, topography, and soil type, which are conditions that pre-exist in a place. Some changes to existing conditions can be made, through irrigation or soil amelioration for example, but only with great effort and determination. However, while the garden itself is fixed in place, the chapters in this volume show that what does travel are the garden ideas, the seeds and plants, and the garden designers themselves.
A plant can be carried from one region of the world to another, but it is not always well adapted to the new environment. New information about cultivation methods may be required, or the environment itself may have to be altered to make it more hospitable to the new variety. Treatises (or, in some cases, epistolary correspondence) that record agricultural and botanical knowledge so that it can be transmitted are instrumental in effecting such plant exchanges. The diffusion of Hellenistic texts such as the Dioscorides *De materia medica* led to agricultural change, particularly in al-Andalus (modern Spain and Portugal), which became immensely productive and wealthy as a result of new agricultural practices and the importation of new plant varieties. A botanical treatise on the cultivation and uses of plants for pharmacological usage, *De materia medica* was written c. 78 C.E. by a Greek physician, copied many times for patrons in the Byzantine court, and then glossed and eventually translated into Arabic for Muslim patrons. It is a relatively well-studied example of scientific transmission because it, among other botanical and agricultural treatises, explains how knowledge about plants from elsewhere became known in the Andalusian landscape. For exotic plant varieties to be domesticated and flourish, new knowledge was required.

Similarly, in the sixteenth century, the letters of the Venetian Andrea Navagero describing his observation of the gardens of southern Spain were sent back to Italy, where they circulated and may have inspired the waterworks at Villa della Torre, Villa d’Este, and Villa Lante (see chapters 2, 3, and 6). The practice of looking back to Greek, Roman, and Persian precedents to explain “the formation of Islamic art” has a distinguished pedigree in art history, but the transmission of texts like Navagero’s has been less studied, in part because they leap synchronically across borders and require the reader (and scholar who studies them) to understand both the context that generates the text and the context into which the text is received.

The present volume, *Gardens of Renaissance Europe and the Islamic Empires: Encounters and Confluences*, asks us to plunge into the interesting topic of exchanges between Islam and the West. But before we look at the connections, we should pause and ask, what are we talking about when we talk about Islamic gardens? Whereas Europe is a bounded geographical territory and the Renaissance was a well-defined period of time, the category of “Islamic empires” or its often-used corollary, the “Islamic world,” is slightly more problematic. Whether Islamic gardens are framed categorically as “the Islamic garden” or in multivalent terms as gardens that existed in various times and places in that area that we refer to as the “Islamic world,” how are they defined and understood? Clearly, there were enough differences and distance between Islamic and Renaissance gardens to stimulate comparisons and thus prompt the gathering of the essays for this volume. But it is not enough to simply compare and mark confluences. We first need to know what the Islamic garden is as a category of analysis.

Historians have generally talked about Islamic gardens in four ways: as literary themes, formal compositions, living environments, and cultural expressions. In the first category, the garden is framed as an idea and a literary motif. These are imagined, often ideal, gardens that cannot be seen yet have a powerful effect on real gardens. Foremost among the texts that describe an unseen garden is the Qurʾan. In multiple verses, the Qurʾan describes the garden of paradise as an ideal, promised place that is the heavenly reward for the faithful.

Announce to those who believe

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2 GARDENS OF RENAISSANCE EUROPE AND THE ISLAMIC EMPIRES
and have done good deeds,
glad tidings of gardens under which
rivers flow.

(Surat al-Baqarah 2:25)

The semblance of Paradise promised the pious and
devout
(is that of a garden) with streams of water that will not
go rank,
and rivers of milk whose taste will not undergo a change,
and rivers of wine delectable to drinkers,
and streams of purified honey,
and fruits of every kind in them, and forgiveness of their
Lord.

(Surat al-Muhammad 47:15)

A shady garden beneath which flow rivers of water, milk,
wine, and honey, and with fruit that is forever ripe, para-
dise as an imagined place (unknowable to the living except
through the descriptions given of it) both resembles the
earthly garden and is fundamentally different from it.
Although both are provided by God, the human being must
labor in the earthly garden to make it bear fruit, whereas in
paradise the garden simply is.

The garden is also idealized in Arabic, Persian, and
Turkish poetry. The sight of a neglected garden might
be equated with memory and loss, but in a flourishing
garden the flowers and fragrances are often metaphors for
love, the beauty of the beloved, and sensory delight. Thus,
when the fourteenth-century Andalusian poet Ibn Zamrak
writes about a tree with “plaited hair,” a “slender neck,”
and a canopy “decked in its blossoms like a necklace,” it is
not quite clear whether he is describing an actual tree or a
human being.¹ Poetry is often ambiguous in this manner,
telling us less about form and contents of actual gardens
than about their importance in the arts as sites of pleasure
and as literary motifs that could evoke other ideas.

Some texts recorded detailed descriptions of real
gardens. For example, in A.H 903. / 1497/98), the Mughal
emperor Babur described in his memoirs two of the
gardens built by his predecessor Timur: “To the east of
Samarkand he had two gardens constructed. The farther
of the two is called Bagh-i-Dulday and the nearer Bagh-i-
Dilgusha. An avenue was made from the Dilgusha Garden
to the Turquoise Gate, and on both sides poplar trees were
planted. In the Dilgusha a large pavilion was constructed
and in it Timur Beg’s India campaign was depicted.”²
Throughout the Baburnama, he wrote copiously and in
great detail about gardens, naming specific tree variet-
ies and describing pavilions, murals, pools, and laid-out
avenues (as explained by Sinclair in this volume). As a text,
his memoirs capture not only the appearance of some of the
great gardens of his day, but also the response to them of an
appreciative yet critical patron.

Another, even more grounded kind of text is the
botanical treatise and agricultural manual. For example,
emerging from a long tradition of agricultural manuals
that are related to the botanical tradition of Dioscorides,
the Irshad az-Zara‘ah (Guide for agriculture) was written
in 1515 by Qasim b. Yusuf Abu Nasr in Herat. The contents
of the treatise are revealed by some of its section titles: “On
the Planting of Saplings, Flowers, and Aromatic Plants in
Relation to Each Other in a Chahārbāgh According to a
Symmetrical Landscape Plan” and “Layout of a Chahārbāgh
with Pavilion.”³ These kinds of practical texts were not
entirely free of metaphor—both the gardens and the pavil-
ion are equated with paradise in the Irshad az-Zara‘ah—but
they clearly prioritized how-to information rather than
the flights of fancy found in poetry. From the Qur’an to
poetry and treatises, texts provide important documentary

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evidence. The challenge is to link the texts to actual garden sites.

In our list of four categories of analysis, the second emphasizes form and typology. The emphasis on identifying typology sprang from the need to define the subject: a garden was invested with certain meanings and intentions that made it more than a mere place or a plot. To be a garden, it had to have both form and symbolic meaning. However, the typological analysis quickly focused on one garden form: the quadripartite, cross-axial *chaharbagh*. Because the Qur’an describes paradise as a gardened place (*janna*) with four rivers, many scholars have interpreted that text to have provided the plan for the earthly Islamic garden. This has led to the popular but incorrect assumption that the *chaharbagh* was coterminous with the Islamic garden, with the consequence that there was little investigation into the myriad other garden forms: the courtyard organized around a large central pool (e.g., the Court of the Myrtles at the Alhambra), the stepped garden (e.g., the Bagh-i Babur in Kabul), the *bustan* or orchard garden (e.g., the Agdal gardens in Marrakesh), and gardens that adapted themselves to large water bodies (e.g., Hauz Khas in Delhi). There have been some notable exceptions: James Dickie’s attribution of a *villa rustica* and *villa urbana* model at the fourteenth-century Court of the Myrtles and Court of the Lions, respectively, was an attempt to grapple with landscape typology and to explain the differences between the Alhambra’s two largest courtyards. Ebba Koch’s study of the waterfront garden as a type that developed in Mughal palaces and tombs has been more successful and far-reaching in its implications. Nurhan Atasoy’s study of Ottoman gardens shifted the emphasis away from garden typology to look instead at the horticultural contents and the social life that occurred in garden settings.

An important source of information about the composition of gardens comes from paintings. In illustrated copies of manuscripts, from the *Baburnama*, or memoirs of Babur, to the *Khamsa* of Nizami and the *Haft Awrang* of Jami, there is a rich tradition of depicting romantic scenes as well as stately events in gardens. Sometimes the garden is shown as a *chaharbagh*, as in the painting of Babur supervising the laying out of the Bagh-i Wafa in a c. 1590 copy of the *Baburnama*. But more often the scene shows a pavilion set within a garden of plane trees, fruit trees, and slender cypresses with clinging vines, on a field of turf with small clumps of brightly colored flowers, perhaps traversed by a silvery stream or man-made water channel. The manuscripts distort space by shrinking the actual size of the garden for the sake of revealing as much of the scene as possible. The scale never mimics the actual scale of a garden, but the relationships between individual elements are quite revealing and give a sense of how cypresses in gardens might have provided vertical accents, how the geometrically paved surface of a pavilion’s floor contrasted with the green and floral carpet of vegetation that surrounded it, and how playful illusion made it hard to discern the difference between the natural landscape and the scene—whether painted or framed by a window is often hard to tell—on the pavilion’s rear wall. Most important of all, manuscripts show how people enjoyed their gardens.

Archaeology is also an important source for garden form. In the past, excavations typically dug past the actual garden, ignoring the soil itself and instead searching through it for the artifact or stone wall. Thus, at Lashkari Bazaar, an eleventh-century palace complex near Bust (Afghanistan), the plan as revealed by archaeologists suggests that some of the courtyards with central pavilions were probably gardened, but they were never excavated as such. The garden was not the focus in the excavations.
Prologue

and site survey, but was simply an incidental if fortuitous by-product. But in recent decades archaeologists have dug with the express intention of revealing the garden and its contents, often using new technologies to do so. The benefit of archaeology is its insistence on specificity. Rather than asserting the existence of a typology based on comparison with other sites, or studying visual depictions of gardens that may not have existed except in the imagination of the painter, archaeology discloses that the unearthed form rarely conforms to any ideal model. As a result, archaeology can disrupt typologies, revealing a site as it was, with all its peculiarities, rather than as the typological model that we may wish it to be. For example, although Stronach did not actually find a four-part garden at Pasargardae, the need to read it as a chaharbagh has pushed it into a category where it does not actually belong, and it has been cited in countless essays on Islamic gardens as the first known example of a chaharbagh. Quadripartite axiality is certainly implied, but, as in Roman precursors, the cross-axial viewing axes are not actually inscribed in the plan. I point this out not to quibble about what is or is not a “true” chaharbagh, but to reveal the pressure that typology can exert on our readings of Islamic landscapes.

We have seen that texts like that of Dioscorides could be transmitted from one culture to another relatively easily. Form can also be transmitted because it can be regularized and abstracted, even to the point of stripping it of meaning or endowing it with new meaning for its new context. There are many points of convergence between Islamic and Western gardens, from the Middle Ages to modernity. However, the study of the Islamic garden has been hampered by its blindness to formal and technical contributions from beyond the Islamic world (and Europeanists can be similarly chastised for having looked inward rather than outward). This is not only a matter of needing to pay closer attention to exchanges like those of Navagero and Pierre Belon (see chapters 2 and 4 in this volume). In the field of Islamic garden history, gardens from contexts that were clearly non-Muslim are too often set to one side as not belonging to that greater category (however defined) of “the Islamic garden.” Thus, the Rajput gardens of South Asia in the sixteenth century are barely mentioned alongside contemporary Mughal gardens in surveys of the Islamic garden, despite the fact that they often employed the same artisans, cultivated the same natural landscape, relied on the same kinds of hydraulic works for irrigation, and produced gardens that fit squarely into the category of a quadripartite, cross-axial space with fountains, pools, and water channels—in other words, a chaharbagh.

Similarly, the emphasis on normative categories that exclude non-Muslim influences makes it difficult to understand the appearance of the stone tracery that fills the quadrants of the early seventeenth-century Anguri Bagh at the Agra Fort. These are more than stone frames laid on the surface of the garden: they form deep, stone-lined pockets approximately six feet in depth. They were not overlaid on the existing garden at some point in its history but are part of its structure. They bear strong resemblance to the parterres of French gardens at Anet in Eure-et-Loir (1547) and the Palais du Luxembourg in Paris (1615), but it is not demonstrated how such a technique for dividing the space of large garden plots could have been transmitted from France to India, if indeed it was transferred at all. Textiles are one possible mode of transfer, and numerous scholars have noted the similarity of the French garden parterre to French embroideries, brocades, and tapestries. Although it has yet to be proven, a likely path of transmission began with the importation into France of Persian and Mughal carpets, on which designs the French embroiderers based their patterns, inspiring garden designers to emulate them...
with parterres de broderie made of colorful flowers. These textiles, which circulated widely, may in turn have inspired innovations in Mughal garden design. In sum, it is clear that for some of the answers as to why Islamic gardens developed as they did, we need to turn to sources beyond the Islamic world.

In the third category, gardens have been studied as environmental entities. The agricultural and botanical texts cited above were written for the sake of promoting and preserving scientific knowledge about plants and methods of cultivation. They reveal nothing about the dramatic visual effect or the symbolic meaning of actual or ideal gardens, but instead explain how the natural environment was adapted to become a place of productivity and abundance, and as such they provide insight into gardens as socio-ecological systems. The environmental or geographical approach mandates that the garden be understood in ways quite different from the two-dimensional floor plans favored by architectural historians and archaeologists. Instead, it looks at the garden as a system that unfolds in time and in response to environmental factors. James L. Wescoat Jr. has championed this kind of framework in his studies of the hydraulic landscape of South Asia under the Mughals. Contextualized thus, the garden is not an isolated site but part of a larger landscape that includes water sources, natural vegetation, and climate, all of which originate somewhere outside of the garden yet have a profound impact on the kinds of plants grown therein. The environment is characterized by specific natural conditions that would seem to impede cross-cultural comparisons, but in fact the environmental approach can bypass cultural fixity by revealing the practical advantages of botanical exchange. Precisely because the environmental approach looks at cultivation as a utilitarian practice in which the cultivator is more concerned with seeds and drought than ideology and statecraft, it can help to explain why and how some horticultural techniques and plants traveled as they did. The motives were often pragmatic. From a horticultural and environmental perspective, a rose is simply a rose.

The fourth category treats gardens as cultural productions that reflect social values and ideology. This way of framing gardens sees the rose as a highly meaningful flower that has symbolic associations with the Prophet or, in poetry, can represent the lips or cheeks of the beloved. The emphasis is on how plants and gardens impact human society and why they matter to art, medicine, cuisine, spiritual life, and the imagination. It can also examine the agricultural economy, in which a fragrant flower such as the rose might be grown as a crop for the perfume industry. Most significantly, the cultural perspective considers the role of the gardener and patron as decision-makers who carried garden knowledge in their minds and hands as they traveled. Such an example is Mirak-i Sayyid Ghiyas, who was born and worked in Herat in the fifteenth century for Timurid patrons but moved to India as a result of the Uzbek invasions of Herat. In India he served Babur in the period 1526 to 1530, when the Mughal Empire was coming into being, and was no doubt an important disseminator of Persian ideas in the Indic landscape. By 1540 he had moved again, this time to Bukhara to serve as gardener for an Uzbek patron.

But even nongardeners could influence gardening. Thus, when the musician Ziryab arrived in al-Andalus in the ninth century, he popularized the consumption of asparagus, perhaps because he had tasted the vegetable in Iraq, from whence he came. The demand, which came from the kitchen, surely was met by cultivators out in the garden. Similarly, as we see in this volume, many exchanges between Islam and Renaissance Europe occurred not only because of the mobility of skilled practitioners, but also
because enthusiasts observed wondrous garden effects and recorded what they saw for eager readers far away.

In addition to emphasizing the social life of people, the cultural framework looks at the garden as a symbolic representation of the human-inhabited landscape and territory. Thus, the palace garden is not only a place of beautiful flowers celebrated in manuscript painting and rich carpets, and an agricultural site where utilitarian irrigation and plant propagation occur; it is also a stage for statecraft and ceremony, and even more, a sphere in which the underlying order of the political system is expressed. Because the garden looks natural—trees seem to grow on their own, flowers bloom in the absence of the gardener who fertilized and watered them—it can express political ideas that then appear naturally ordained. The apparently logical order of the garden can persuade its occupants that, instead of reflecting the will of the king, carried out through the design and human labor, it is natural and God-given. This was the argument that I made with respect to the gardens of the tenth-century Andalusian palace Madinat al-Zahra’, where I showed that the garden was a metaphor for the entire cultivated landscape, and the central, elevated position of the king as its central occupant mirrored his position at the apex of the political hierarchy.22

Conclusion

The four frameworks outlined above represent four of the ways that historians have tended to study gardens, and they overlap a great deal. To some degree they developed sequentially. The garden was studied primarily through its texts and form through the middle of the twentieth century. The socio-cultural emphasis developed in the 1970s in response to the shift in history toward social history. The environmental framework is a more recent phenomenon, spurred both by political “green” movements as well as the recognition that the nation-state as a category of analysis is inadequate for addressing problems of watersheds, aquifers, global warming, and species extinction. It may be more productive to view the world as a series of interconnected habitats—or landscapes.

The scholarly literature on Islamic gardens began with books and essays that relied on textual descriptions and formal typologies to define a category that was then inherited—for better or worse—by later scholars. Thus, the Islamic garden as a category came into being not as a reflection of the many different types of garden and designed landscape that have existed from Indonesia to Morocco, but as a literary idea and a formal abstraction. For the idea to cohere, it required a consistent set of principles by which the Islamic garden could be identified and which would serve as a framework for analysis. The field was thus launched by publications that were important field studies, but in which the coverage encompassed the entire field of Islamic gardens, or entire regions—the Persian garden and Mughal garden being the two most ubiquitous. The result was a great deal of description of what the gardens were, rather than analysis of why and when they developed as they did. Coherence was favored; exceptions or singularities might be mentioned but only in cursory fashion. Coherence also led to a false sense of unity, as though the regions dominated by Islam and ruled by Muslim leaders could be explained without reference to external pressures, enclosing borders, and exchanges effected through trade and travel.

The present volume challenges that putative coherence, not by dismantling the Persian or Mughal garden as a category of analysis, but by showing its place on a much larger world stage where rich carpets and textiles with floral motifs were admired, exchanged, and perhaps copied.
between Christians and Muslim patrons; where there was a shared tradition of gardens “as spaces of imagination”; where travelers like Thomas Roe and Peter Mundy reported back to European audiences and thus whetted their appetites for more (chapter 7); where in both contexts a new middle class was emerging—different from the elite patrons of the past—that needed parks and promenades for social gathering; and where statecraft was a shared concern. The volume gazes from Islam westward, and from Europe to the east at least as far as India.

Having seen the fruits of this enterprise in this volume, I wonder whether it would be similarly beneficial to explore connections in the other direction: if porcelain, silk, and paper as well as the technologies and trained artisans for making them were brought to Iran and Central Asia from China, it is easy to imagine similar emulation in the realm of gardens. This volume shows that Muslim patrons and gardeners were indeed in communication with garden patrons and designers elsewhere, and that although the gardens were rooted in place, there was active dialogue about gardens that took place through spoken and written words, textiles, paintings, botanical specimens, and traveling gardeners. Gardens of Renaissance Europe and the Islamic Empires, in pointing to connections and confluences between Islam and Europe, shows that those worlds were by no means self-contained.

NOTES


Between the years 1671 and 1675, young Ambrosio Bembo (1652–1705) traveled across the Middle East in the service of the Venetian government. He left an account of his travels, illustrated by the sketches of a young French draftsman, Guillaume-Joseph Grelot, whom he met in Asia. Grelot joined the Venetian traveling party as a skilled observer capable of illuminating the dry account of a businessman and diplomat. When Bembo returned to Venice, he settled back into the life of the political and cultural elite, who split their time between city residences and country estates. The frontispiece of his travelogue features a splendid bird’s-eye view of a riverfront villa on the terraferma. The complex features a luxurious home, several appurtenant structures, and extensive gardens with pergolas and other intensive architectural treatments of plant materials. The scant references in archival documents make it difficult to readily identify whether Ambrosio or another branch of the Bembo family owned this particular casa di statio. The image, however, reveals a remarkable conflation by Grelot of the padiglione and large quadrilateral garden spaces described in Bembo’s discussion of eastern landmarks with the neoclassical style of the properties enjoyed by Bembo’s closest relations. Most noteworthy may be the assumption that a Venetian country house and its designed landscape could be equal in magnificence to those visited in Persia and other places of interest in the Islamic world.

Ambrosio Bembo’s villa was just one of over a thousand luxury country residences built by early modern Venetians as they transformed their mainland Italian provinces into a powerful agricultural engine for a revamped economy that no longer relied entirely on profits from international trade. The elegant main house, pleasure gardens, and surrounding lands signified a commitment to the profitable use of the terraferma by the economic elite, and the style of the architecture and gardens further enunciated a Venetian acknowledgment of notable predecessors.
in both villa building and intensive agriculture. In this essay we will consider the surprisingly eclectic group of sources these patrons consulted beyond traditional Roman models for country life. In a raft of published travelogues and collections of geographical texts, including Giovanni Battista Ramusio’s monumental *Navigazioni e viaggi* (1556) and others printed by Aldus Manutius and Francesco Sansovino, the Venetian printing industry answered a clear demand for information about the places some Venetians visited and some only imagined. These books, in turn, influenced design decisions, agricultural experimentation, and villa culture itself, and individuals such as Ambrosio Bembo found justification for deciding to invest heavily in stately country homes by looking not only at what their peers were doing but also at the marvelous places they saw in their own travels or found described in the travel accounts of others (figs. 2.1 and 2.2).

For a cultural geographer and student of the early modern garden, the history of agriculture, and the intellectual dynamism of Renaissance Venetians, the villa captured

by Grélot (fig. 2.2) represents a descendant of the Venetian type developed by earlier members of the elite patron class of villa builders, which included his much more famous family members the Venetian ambassador Bernardo Bembo (1433–1519) and his son, the author and cardinal Pietro Bembo (1470–1547), as well as their peers and colleagues. The tradition of villa ownership amongst his class drove Ambrosio to have at least a passing interest in gardens and architecture. This chapter will explore similar, if earlier, travelers, geographers, and chorographers whose travelogues and letters introduced complementary and exotic elements to Europe via Venice and the Veneto. It asks us to reimagine the Venetian villa and its agricultural territories as repositories of innovation as much as displays of a passion for classical antiquity and Roman archetypes. One key element involves our assessment of a large corpus of travelers’ accounts, fantastic descriptions of foreign lands, and geographical texts as complements to the surviving classical
writings on villas and garden architecture. Furthermore, we must examine the adoption and adaptation of new or novel forms and features in the Renaissance in addition to those better understood classical antecedents. By doing so, we can develop a more coherent picture of a Venetian aesthetic that balanced a preference for Roman models against a fascination with the equally salubrious style Venetians encountered in the Islamic world.

In the end, the countryside of the early modern Veneto bore witness to an expansive vision of acceptable prototypes for villas and gardens. Learning from both the past and their adventures in foreign lands, Bembo and his fellow viaggiatori inspired Venetian readers to refine their landscape projects to exhibit both human control and sensitivity to their natural materials. The sublime marriage of art and nature in the Venetian villa gardens reveals an intellectual and aesthetic response to new information from the Islamic world, information that transformed many villa owners themselves into agents of change.

Venetians Abroad and at Home

New ideas and approaches to the designed landscape were a direct result of Venetian engagement with religious, social, and political “others.” Venetian villas reflect a receptive and experimental temperament that was complemented by a remarkable interest in the world beyond the Veneto. The likelihood that a Venetian would come in contact with an Arab, a Turk, a Persian, or an Englishman was an outgrowth of the far-reaching tentacles of Venetian trade and the subsequent role played by Venetians as ambassadors in a period dominated by nation-states, empires, and the papacy.4 These individuals interacted with foreign governments and private business partners across the Mediterranean and the Near East with an eye out for the guarantee of continued profits and, if not friendly, at least correct relationships. Early modern travelers such as Luigi Roncinotto, Giosofat Barbaro, and Andrea Navagero were exposed to new experiences and encountered peoples, places, and cultures never mentioned by ancient geographers or historians.5

Although not all new discoveries inspired positive responses, many reports identified those aspects of the new that were worthy examples. Luigi Roncinotto was overseer and agent in Egypt and Syria for the Venetian nobleman Domenico Priuli in the first half of the sixteenth century. He traveled to Calcutta between 1529 and 1532 and left an account of his passage through Egypt, Ethiopia, the Arabian Desert, and Persia.6 Roncinotto described modern cities and their fabulous histories in a rich travelogue that surely entertained his employer and the Venetian audience. However, history and wonders aside, the specific details he enunciates suggest that his readers had an interest in the places and spaces visited in the foreign lands he and his fellows described. As a matter of course, the receptive Venetian audience evaluated new and fascinating information, deeming much from across the cultural divide intriguing complements or alternatives to the theories and methods derived from the exalted Greek and Roman authorities. It might not be surprising, then, that after exposure to tales of garden courts, cooling fountains, and ripe orchards across the Islamic world, members of the Venetian elite would create splendid villas with features derived from these new types. These encounters with the Islamic landscape, its built environment, and the magnificent gardens captivated Venetians and subsequently influenced the refinement of Renaissance landscape designs and use of gardens in an increasingly ideological refashioning of the agricultural territories of the early modern Veneto.
Travelers’ Tales and Turkish Models

The landscape of the sixteenth-century Veneto slowly absorbed a variety of interpretations of manipulated nature, including types from the Near East and points farther south and east. The intrepid Venetian travelers or viaggiatori, in particular, introduced their contemporaries to a veritable host of foreign ideas, ranging from architectural style to military tactics. One example of an alternative, yet complementary, model was Xenophon’s Cyrus, whose Persian ethnicity did not deny him respect as a worthy ruler and as a hands-on gardener. Here, however, I shall focus rather on a series of Venetian encounters with the Islamic world that reveal a Venetian interest in the practical benefits of these encounters to the republic and to individual Venetians.

Caterino Zeno (active second half of the fifteenth century) was a patrician from a long-ennobled family whose service to the republic placed them among the social elite. In addition, the Zeno family had a reputation for daring adventures and ocean-going exploration. For example, it was believed that Caterino’s ancestors Nicolò and Antonio Zen had traveled to the North Pole and bathed in hot springs in Greenland. Caterino’s own travels in the Near East (1471–75) provided a wealth of information about the turbulent situation surrounding the late fifteenth-century struggle between the Persians and the Turks. The Venetians certainly had a vested interest in Persian expansion that would put pressure on the powerful Ottoman sultan. Political realities aside, Zeno’s description certainly puts one thing into perspective: to an astute Venetian, the path to knowledge lay open to those who break the shackles of tradition and avail themselves of new knowledge that might bring to Venice, and Europe, new solutions.

The dedication to Daniele Barbaro in the first edition (1558) announces that “those who read this will find marvelous things in warfare, customs, clothing, the way people live, places of interest and different animals and fish.” Beyond the generous portion of novelties, which would be the main thrust of any travelogue, the Commentarii had a more serious purpose. The proem, composed, according to the publisher, by Zeno himself, states unequivocally that there are additional models for Italian readers of his work. Zeno claims, “Because there are between the Sultan of Egypt and the King of Persia many men excellent in war, and worthy not only of comparison with the famous barbarian kings of old but also with the great Greek and Roman captains in all those things, they can be considered in the highest rank of clever leaders of armies.” Zeno rails against the conventional wisdom that regarded the peoples of the East as irrelevant or unreasonable. Such a bold statement may have raised eyebrows among readers steeped in the Latin and Greek classics, but a positive assessment of the Turkish sultan’s stubborn opponent, the Turkmen prince Uzun Hasan (also known as Hasan Beg or Assambei) of Persia (1423–1478), paralleled the accepted image of Cyrus as a model prince. On the one hand, there is reason to believe that Zeno’s pro-Persian attitude would have come as little or no surprise to his peers. Zeno was “particularly well-equipped” to represent the republic in negotiations with potential allies because he was “personally acquainted with the East” and even related through his mother to Uzun Hasan’s wife Despina Caterina. As a result, Uzun Hasan was Caterino’s barba or uncle, a fact that appears to explain to the writer the rationale behind his appointment as the Venetian ambassador and “thus, in this way the nipote of Ussun Cassan Re di Persia, and conosciutto of the Despina, was made welcome and then lodged in his Palace.” The traditional affirmation of social, political, and economic ties through marriage, a process crucial to the transfer of agricultural philosophy.
from Venice to Verona and other Venetian mainland provinces, apparently helped Zeno and Uzun Hasan bridge their cultural gaps and led eventually to his revolutionary characterization of the East. Zeno understood Venice’s unique position between Europe and Asia and invested his energies in the creation of a strong alliance between the republic and Uzun Hasan. His comments reflect his need for a new approach to Persia and the East. His involvement also prompted him to attack the simple view of history and promote the inclusion of other groups into the remote and recent past. He admitted that this goal was not easily achieved “because it was difficult to free the mind of well-rooted but aged opinions.”

A second travel account appeared in a volume edited and published by Francesco Sansovino (1521–1583), son of the Florentine sculptor Jacopo Tatti, better known by the adopted surname Sansovino, who was the most illustrious and honored architect in Venice. Many of his efforts were published anonymously, but have since been attributed to Francesco based on references in prefaces and dedications and their appearance in collections published by Sansovino. One of these anonymous works was the *Libri tre delle cose de Tvrchi*, included in a collection of stories along with Giosofat Barbaro’s *Viaggio alla Tana* and Roncinotto’s *Viaggio di Colocut*. Sansovino, also the author of an account of the Venetian wars with the Turks, had compiled information about the Ottoman Empire, with its warlike and troublesome peoples. Here he presents the reader with a description of some Turkish customs and places. He justifies his efforts, perhaps because of the favorable nature of much of the report, on the grounds of historical duty. It should be anathema to historians, Sansovino says, to neglect to record the spirit and the happenings of our times, no matter their source or the character of the individuals or groups in question. Indeed, “because things change and pass, as the time of Alexander the Great and the Romans have, so will our times of the sultan, and we must leave memories for posterity!” In other words, it appears that Sansovino was characterizing all events as historically significant. Furthermore, Venetian encounters with the sultan were almost immediately relegated to a near past that had a great deal in common with the distant Hellenistic past of Greece and Rome and the recent turbulent Byzantine era.

The description of the Turks and the Turkish realm has a number of passages that reinforce the idea that the sultan is in part an heir of and in part akin to the Romans and Greeks of antiquity. He states that their lands had previously been Roman and that their scholars studied Greek philosophy. The essay also provides a number of descriptions of “Turkish” cities rich in gardens, including Adrianople (modern Edirne) and Gravosa (Dubrovnik). The latter city, originally part of the Republic of Ragusa but at that time tributary to the sultan, is said to be full of beautiful homes with gardens full of citrus, cedar, and fruit trees watered by fountains fed from aqueducts.

In his writing, Sansovino singles out a few Venetians for special mention. Of these, Andrea Gritti (1455–1538) played an important role in the reestablishment of Venetian dominance over northeastern Italy during his reign as doge (1523–38). Sansovino asserts that Gritti must be acknowledged for his open-minded and forward-thinking study of the languages and cultures of the Mediterranean. Making no distinctions between old and new, practical and scholarly, he reminds us that Gritti had studied all the things Sansovino described. This new type of learned Venetian did not embrace only the traditional study of classical literature. Gritti, fit to rule in the troubled world Venice existed in, was prepared for everything. He could speak—and with some eloquence, Sansovino adds—Italian, Latin, Greek, and Turkish.
Sansovino’s praise of Gritti admits that noble Venetians had the best opportunity to travel and study foreign cultures and languages. In his *Annals*, Sansovino reveals that he too had learned Greek, Latin, and Turkish. More importantly, he had read widely in a determined effort to draw informed conclusions about the positive contributions made by the Turks. According to Sansovino, “I have tirelessly read many Greek, Turkish, and Latin writers” with the sole intent “of helping the public and demonstrating any Turkish ingenuity and artifice” that might be to “our benefit.” It appears that nobles, scholars, and businessmen had one thing in common: an increasing regard for the institutions and peoples of the East.

Persian Palaces, Near Eastern Gardens, and Venetian Villas

Along with an interest in Eastern society and behaviors, Venetians delivered rich descriptions of marvelous places and the buildings, gardens, and spaces crafted by their increasingly esteemed neighbors in the non-Christian realms. Antonio Manuzio, Aldus’s son and successor, published a collection of *viaggiatori* accounts in 1543. Among the most notable entries are the accounts of Giosofat Barbaro and Luigi Roncinotto, the first a member of an illustrious Venetian patrician family and the second the representative and business agent mentioned earlier. In the dedication to Antonio Barbarigo, Manuzio goes on the record in favor of a complete recounting of contacts with other peoples and the interesting nature of their difference. He knows that what follows will sound strange but is certain that it will be valuable: “For the announcement of many useful things for human life, much of the knowledge of all days again is gained from many places and countries, through their travels: of which some will have been familiar or domestic in past centuries to our ancestors, there also will come strange and unknown and such that will be new to modern ears.” Barbaro’s description of his travels to Persia and Roncinotto’s rich treatment of Syria and Egypt were popular with the Italian audience. Barbaro’s account of his 1436 trip to Tana and the Black Sea region is presented as an opening up of a world known only to Venetian merchants and mariners. These descriptions also played a role in the manner in which Venetian nobles prepared to invest in gardens and country houses. The second selection in this collection, an anonymous account of a trip to Persia, deals first with the tenuous political situation, also discussed by Caterino Zeno, brought on by the wars between the Turkmen prince Assambei (the aforementioned Uzun Hasan) and his Ottoman enemies. The excellence of the palaces, the magnificence of the costume, and the beauty of the gardens obviously captured the intrepid Venetian’s fancy, as it does the reader’s. The most lyrical of the multiple lengthy descriptions of the wonderful residences which the Venetian visited is a description of Assambei’s palace in “Thauris” or Tabriz, Iran:

*The place where this lord could be found was like this. First there was a room, and behind this there was a square room four or five paces across, where from eight to ten men waited. There was then another door, in front of which a man stood guard, with a rod in his hand. Through this door you found yourself in a garden with a clover lawn walled with earth faced with flint; then about thirty paces further there is a loggia vaulted in our fashion, four or six steps above the wall. In the middle of this loggia is a fountain like a small canal that is always full. The lord sat on a cushion with gold brocade in the entrance to the loggia on the left-hand side, with another similar cushion behind his*
shoulders. On either side there was a Moorish guard with his buckler and scimitar. The entire loggia was covered with rugs, and smelled of them. The loggia was completely worked in mosaic not minute like we use, but big, and most beautiful of different colors.34

Barbaro also tells us of massive waterworks, ancient cities, and fertile countryside. The framework for his observations is interesting. When he discusses something that might at first glance seem improbable, he counts on his reader’s local knowledge to put things in perspective. Discussing Seleucia, he notes its great antiquity.35 He locates it on the river Curcho, which, he suggests, might remind a Venetian of the Brenta.36 As for its theater, he confirms its great size when he compares it to the surviving Roman amphitheater of Verona.37 He does not believe that this similarity makes Seleucia’s monument Roman, as he had seen only “Armenian” inscriptions instead of the Latin ones that would ornament a true Roman edifice.38

Finally, in the Viaggio di Colocut, Luigi Roncinotto makes a great deal of the lengths to which a Venetian might go in search of profits. The most outstanding feature of Roncinotto’s essay is his brief discussion of the potential for a canal between the Red Sea and the Mediterranean.39 Such an undertaking might have been met with disbelief by many, but readers in Venice, a city built on land stolen from the Adriatic and fed by land borrowed from the estuaries of the Brenta and the Bacchiglione, had no little pride in man’s ability to tame nature. This astounding venture was made more plausible as Roncinotto announced that the ancient kings of Egypt had begun but never completed this project. Now it had fallen to the sultan to take up the canal, laying about with engineers and brute force to beat the desert into submission. Surely Domenico Priuli, Roncinotto’s employer, cannot have failed to receive such commentary from Roncinotto immediately. It would also seem likely that Roncinotto’s asides about the customs and the country in which he worked would have found a keen ear in Priuli.

Roncinotto reports that Ethiopia is an “earthly paradise” or place of beauty, bounty, and wonder, recognizably similar to the biblical Eden, which was unreachable by virtue of an enormous desert more than one hundred days across. That does not stop him from telling his reader that across the highest mountains may be trees of the sun and the moon. He makes certain that we understand that Pelusio (Pelusium) in Egypt was once part of a Roman province, but his historical approach also allows him to locate these lands in the historical context already available to well-read Venetians. For example, when he talks about other cities, such as Baghdad in Mesopotamia, he finds its roots in an antiquity that would appeal to contemporary Venetians, since he tells us (erroneously) that Baghdad had once been Babylon. Despite numerous inaccuracies and an air of the fantastic, the format of the publication suggests that Priuli and his colleagues had an interest in the foreign lands described by Roncinotto and Barbaro. Although their motives and inspiration cannot be proven, in the sixteenth century, after exposure to travelers’ accounts and perhaps their own travels as members of the Venetian cadre of international businessmen, the Priuli created a splendid villa with exotic features on the island of Murano. The Priuli and the Venetian elite were not creating neo-Islamic villas but rather embracing landscape and architectural features described by a range of travelers as noteworthy elements in their new residences.

The nineteenth-century historian Vincenzo Zanetti cited a sixteenth-century Carmin composed by Cornelio Castaldi that described the atmosphere of the Villa Priuli on the Venetian island of Murano. According to Zanetti, however,
of this most delicious place . . . what remains? A humble casetta [small residential building] and a lush vegetable garden. And yet in it was gathered together everything so that art could produce from nature a more beautiful, more rich and more sophisticated ameno [place]; there, besides rooms and towers with priceless sculpture and paintings, watercourses, fountains, woods, forests, and a cavern closed by three hundred iron bars there are very rare birds from parrots to nightingales and plants and flowers and “fruit that other gardens cannot offer.” The Villa Priuli was one of the numerous patrician villas that adorned our island in the fifteenth century, thus, Castaldi had reason to call Murano “the friendly refuge of the heroes of the nation.”

Zanetti’s Guide to Murano and Its Celebrated Glassworks (1866) also mentioned the Palazzo Priuli on Murano: “Nicolò Priuli di Girolamo had a house that was most beautiful for its site, its form and its adornments; the silence was disturbed only by the murmuring of an abundant vein of water, that left the mouths of four magnificently worked marble tiger heads. Andrea Calmo called the Villa Priuli a ‘terrestrial Paradise for the beauty of the air and the site . . . a place of nymphs and demigods.’” In short, the Priuli house and gardens, as well as the run of similar “suburban” residences on the smaller island of Murano, exhibited some of the first signs of an aesthetic response to the travelers’ descriptions of places and spaces seen across the Islamic ʿumma. The gardens and villas were not themselves expected to be understood as non-Western in type or antecedent. The integration of features noted repeatedly in descriptions of Persian, Turkish, or Egyptian palaces, however, suggests increasing cultural currency for exotic prototypes that complemented conventional forms known from classical antiquity.

The Noble Spirit to See and Know

The driving force behind the importation of new forms and features in gardens and landscapes was the increasing value placed on science, natural history, and expanded inquiry among the educated elite of the Venetian republic. The oligarchy was similarly the class of villa owners, and their training, business affairs, and government service prepared them to collect experiences and digest new concepts for success in foreign relations and trade. Their investment at home in agricultural advances also benefited from the influx of evidence of superlative design, innovative agronomy, and hydraulic engineering, and the publishing industry in Venice pumped out innumerable descriptions of the places they or their peers might visit. One of the most widely praised geographical publications of the sixteenth century, Livio Sanuto’s Geografia Dell’Africa, was published by Damiano Zenaro in 1588. Sanuto provided the rapt European audience with an updated history modeled on the cosmografie (cosmography) of Ptolemy and later descriptions of the neighboring continent. Sanuto’s work must be recognized as a fruit of the pronounced trend in Venetian travel writing and geography to collect information firsthand. Rather than rely on what has been relayed by others or dredged up from older descriptions, Sanuto explains that he has set out to “quench the thirst, and the natural desire that dwells in the noble spirit to see and know.” In order to dispel myths about the mysterious southern realms, his work is based on eyewitness accounts: “all the things that these [authors] have written or drawn on these maps were seen by their own eyes.” Sanuto saw himself as

Embracing the Other
a member of an elite class of observers. But, thanks to the shifting winds of practice in the Veneto, he could expand his inquiry and introduce his reader to the full panoply of North Africa rather than recapitulate classical descriptions of the region: "I will go beyond the study of the histories of the ancients and the moderns . . . so that you will see the things of Africa; both the things made famous by the antichi [ancients] and those new facts that I have discovered."46

Despite his claims to have produced a new and important chorography, Sanuto’s Geografia does little more than survey places of interest and offer brief descriptions of cities, the people who live and work in them, and in some instances the oddities which make such places different from their neighbors and from cities closer to home.47 His superficial handling of North Africa does denote the overlay of modern Islamic habitation in the earlier Roman province and the preceding North African kingdoms. To his readers, then, he leaves the responsibility for drawing conclusions about the place of North Africa in the history of the world. His editor at least lets us know, in no uncertain terms, that he feels comfortable offering facts and opinions thanks to the yeoman efforts of those who came before him, especially those select few who had started Venice on the road to being a new Alexandria. Deborah Howard examines the self-conscious association with Alexandria and her monuments of Venetian merchants in Venice and the East.48 According to Howard, “travellers’ memories of Egypt, and of Alexandria in particular, were woven into the Byzantine fabric of San Marco.”49 She also identifies similarities between Muslim khans or commercial warehouses and Venetian fondachi and introduces the famous lighthouse in the Egyptian port city as a potential model for Mauro Codussi’s campanile for the Cathedral of San Pietro in Castello.50 The legendary Egyptian city represented the classical world’s preeminent storehouse of knowledge. In Venice, the new Alexandria, new contacts and new ideas jostled for attention and demanded the concentration of the cosmopolitan Venetian reader.

Islamic Spain, Acqua Corrente, and the Villa della Torre a Fumane

Venetian experiences in Spain brought home superlative examples of the use of water in engineered landscapes and the agricultural enterprises that predated the Reconquista. Furthermore, the marvelous integrated gardens and cultivated rings of the huerta (orchard) surrounding early modern Iberian cities provided a lively historical paradigm for Venetian investors in the elite patron class. Among the most notable examples is the Villa della Torre at Fumane (1530–60) (fig. 2.3).51 This villa all’antica survives as a concrete example of the link between the new agricultural ideology and classicizing villa architecture. In plan and execution the Villa della Torre owes something to the latest developments in Mannerist architecture, especially to Giulio Romano’s Palazzo del Te in Mantua. The sequence of framed garden rooms, cortili, peschiere, and grottoes recalls the pattern of Romano’s masterpiece. More pertinent for this argument is how this villa incorporated new information and the conventional wisdom of Venetian villa promoters such as the Bembo family, and of other colleagues, including Andrea Navagero, in a way that produced a complex with a spectacular sensitivity to the coherent and unified presentation of the villa and gardens.

From a formal perspective, the Villa della Torre, in Fumane, compares favorably and very straightforwardly with one of the gardens visited and described by the Venetian ambassador to Spain, Andrea Navagero, in his letters to his friends. Although the gardens of Granada
no longer resemble those seen by Navagero, it is worth imagining their visual splendor as a source of wonder and information about garden hydrology (fig. 2.4). An axial view of the Villa della Torre exhibits a sequence of garden rooms similar to the flowing, interconnected spaces of the Alhambra and the Generalife (fig. 2.5). After reading the letters that Navagero shared with Pietro Bembo and Giambattista Ramusio, Giulio della Torre had a clear example of a garden and building complex in which the open space of the planted areas appeared to move into and often through the solid mass of the surrounding or flanking structures. The permeable nature of the columnar screen of the peristyle courtyard and the portals along the central axis opened up the residence. The villa was brought to life by the swift and noisy passage of the water that Giulio redirected to enter the upper terrace and then flow through the central court—into the fishponds, out of a spout in a grotto, across the lower terrace or orchard, and finally out of the walled enclosure and onto the fields below.

At the Villa della Torre, the running water confirmed the open plan of the villa and the permeable character of the structure. Later Renaissance villa gardens are well known for their splendid waterworks. In some of these gardens, the flowing water links areas of the garden together. Although this is still conjectural, several garden historians have pointed to Navagero’s letters as a possible source for
the dynamic use of water in the gardens of mid-cinquecento Italy.52 His descriptions of Granada offer a tantalizing model for the proliferating fountains and burbling water chains in the gardens of powerful clerics and princes. The major landscape interventions of Niccolò Tribolo at the Villa Medici in Castello feature a number of innovative waterworks that may also relate to the design of the Villa della Torre, but the particular attention paid to the dynamic connection watercourses reinforced between the built environment and the agricultural and ornamental landscape at Fumane offers a wonderful example of the influence Spanish Islamic gardens had upon the Renaissance landscape.53 The clever use of hydraulics and water as a connector in a thematic or narrative garden in Roman Renaissance gardens does not exactly
replicate, however, the passage of water from a natural state in the landscape into a controlled feature of the designed architecture of a villa or palace. Furthermore, there are few comparable instances where the water then flowed back to the landscape, where it was used for the amelioration of the agricultural lands owned by the residents of the property. This connection was identified by Navagero as a feature of Spain’s Moorish gardens and seen some decades later at the Villa della Torre. This mid-sixteenth-century garden complex near Verona thus epitomized the important role of water in the modern Italian and Venetian villa in the decades after Navagero’s letters were circulated and later published.

Fascination with this kind of moving water was not entirely novel, but Navagero’s description of the Alhambra piqued the interest of his friends. We can see the importance of water in the complex of the Villa della Torre and imagine the impact the fountains, pools, and watercourses had on visitors to this villa. We can also imagine that these water features referred to a variety of historical and contemporary paradigms, both real and imagined, as the patrons recharacterized their villas as centerpieces of larger agricultural endeavors. Thus, the magnificent gardens of ancient Rome, Andalusia, and the modern Muslim East offered discerning patrons models of refinement worthy of recapitulation in the Veneto. In that vein, Pietro Bembo digressed from his account of the Italian Wars in the final chapter of his history of Venice when he described the 1512 embassy of Domenico Trevisan to Cairo, speaking in glowing terms of the charms of the palace of the Mamluk sultan of Egypt: “The king heard that it was a great man—one as illustrious as himself—who had been sent to him by order of the Senate. The king received him with every honor in a most ample loggia in one of his most lovely gardens. From every column of the loggia hung a cage with singing
nightingales; and the water of the fountains, which ran from more than one side of the court, seemed to murmur sweetly, as if accompanying the songs of the birds.54

Bembo’s ekphrasis reminds us of the increasing number of travelers’ descriptions of gardens and landscapes circulating in Venice in the cinquecento. Of these, Navagero’s letters provide the most explicit link between a garden aesthetic and villa culture. Thanks to the high-profile role played by his nephew Bernardo Navagero (1507–1565) as an ambassador and cardinal, the charms of the Granadine palaces seen by Andrea Navagero in 1526 would have reached an appreciative audience in Rome and thus may have contributed to the increasingly daring use of waterworks in the great gardens built for papabile clerics and their ilk. But it is more likely that the recipients of the original letters from Spain, Ramusio, Bembo, and the Della Torre, would have asked their author to explain himself carefully and, perhaps, to assist or direct them in their efforts to make equally magical gardens that would reveal the hands-on role played by their patrons.55 There is no confirmation of any projects completed under the direction of Navagero at any of his friends’ properties, but his importance as a leading figure in the Venetian cultural hierarchy would be memorialized some years later in Ragusa and may hold a clue to the relationship between a villa in Ragusa and travels in the Islamic world.

Drawing on Egypt for Sources

One lesser-known travel account of a trip to Egypt in 1556 offers another example of a connection between gardens and travel that ultimately influenced the landscapes of early modern Italy. In the middle of the sixteenth century, the Italian fresco painter Pellegrino Brocardo was living on the island of Šipan near the city of Ragusa as an employee of the bishop of Ragusa, Cardinal Ludovico Beccadelli.56 Ragusa was a small autonomous republic essentially under the protection of Venice and the Ottoman Empire during the sixteenth century and an important locus of cultural and economic exchange in the Renaissance. While employed by Beccadelli in Ragusa, Brocardo took an opportunity to travel on a Venetian vessel to Mamluk Alexandria and other sites in Egypt.57 It is understood that the reports of Turkish palaces and Moorish gardens intrigued and inspired Venetian patrons and architects fascinated by the luxurious surroundings enjoyed by their opposite numbers. If we subscribe to Caterino Zeno’s firm belief that “barbarians” like the Persians were the equals of the Greeks and Romans in the prosecution of wars, then we might conclude that other aspects of their culture were worthy of close study. In In museo e in villa, Gigliola Fragnito discusses Brocardo’s trip and his sketches from it but does not uncover a motive for this expensive journey.58 In his introduction to an edited collection of travelers’ accounts, a nineteenth-century scholar, Jacopo Morelli, suggests that, unlike the embassies, merchant activities, or medical research that led the other “less known” Venetians abroad, Brocardo seems to have had no reason for the journey.59 Morelli does note that a Doctor Marino Brocardo authored a medical text and that if he was a relative perhaps this might justify travel to places inhabited by noted early Hellenistic and Islamic physicians.60 This connection seems unlikely, as Pellegrino was a native of Pigna who spent some years in the employ of the church in Ventimiglia.61 Regardless, by 1556 Pellegrino Brocardo had been brought to Šipan, an island some twelve miles north of Ragusa, to paint a portrait cycle and landscape views for the episcopal villa occupied at that time by Ludovico Beccadelli.62 Beccadelli, a biographer of Pietro Bembo and close friend
of Grand Duke Cosimo I de’ Medici, was a cleric and scholar who often yearned for a sweet return to the ease and serenity of his family villa near Bologna. After his elevation as bishop of Ragusa, Beccadelli left Italy determined to make his tenure in Dalmatia as comfortable as possible. In order to survive the potential isolation of life across the Adriatic, Beccadelli set out to rebuild and improve the episcopal villa on Šipan. Brocardo was a member of a team of artists that accompanied the new bishop on the difficult voyage to his new home. The artists were commissioned to turn a decidedly provincial complex into a suitable stand-in for Beccadelli’s beloved Pradalbino, near Bologna. Little information is available about the episcopal villa and the changes made at Beccadelli’s behest except for a description of the frescoed portraits of Italian intellectuals which graced the interior. Beccadelli’s friendship with Bembo, however, and his active participation in villa culture suggest that the bishop’s villa project might reflect contemporary developments in villa and garden design in Italy and the Veneto, where Beccadelli served as papal nuncio earlier in his career.

Brocardo, who produced altarpieces and maps during his career, was commissioned by Beccadelli to produce a portrait cycle and to decorate the villa with landscapes based upon drawings made during a year-long trip to Egypt. As with the images of “famous men,” landscapes were becoming increasingly popular motifs for the decoration of luxury residences. Fragnito argues that the landscapes or views of Cairo and Alexandria were becoming part of the remarkable collection of antiquities, coins, sculptures, and oddities that later composed a museum in Beccadelli’s house in Piazza Santo Stefano in Bologna. If Brocardo’s sketches, his map of Cairo, and his descriptions of the gardens, houses, and customs of the Muslims in Egypt were obtained by Beccadelli after a voyage and preserved as a rare and cherished manuscript, this simple explanation would suffice (fig. 2.6). The timing of the voyage, however, indicates that Brocardo traveled with the blessing of Beccadelli alongside other Italians and Venetians. Ugo Tucci suggests that his motive may have been a study of fortifications and important cities for business and political purposes. It also appears likely that Beccadelli paid
Brocardo’s way, leading me to believe that the bishop hoped to profit from the painter’s exposure to Egypt. Traveling as a paid employee of the bishop, Brocardo observed and recorded fascinating oddities and impressive monuments, some of which he later re-created on the walls of the episcopal villa.

Without more evidence of the character of these lost frescoes, we can only speculate about the relationship between the landscapes and the portrait gallery and between the program and the villa itself. Nadia Aksamija connects the sketchbook with contemporary landscape imagery in her study of Beccadelli and villa culture, but the documents and ruins of the property permit nothing more than conjecture at present (fig. 2.7).67 Despite the lack of surviving frescoes, there is no doubt that, in this one instance, an Italian artist certainly traveled to an Islamic country in the midst of his contract to decorate a Renaissance villa, bringing back with him from overseas memories and images of the fantastic landscape he had visited. The result of this exposure remains obscure, but the fact remains that the episcopal villa on Šipan supports a connection between Venetian villeggiatura and the study of the whole Mediterranean landscape. In part, it was an heir to traditional Italian villas like Beccadelli’s own villa at Pradalbino in the Bolognese hills. This villa, and others built by Beccadelli’s peers in the patronage class, reflected the changing face of early modern Europe, whereby the study of the Islamic Mediterranean paved the way for a patron and an artist to consider the houses and gardens of Cairo and Alexandria as suitable models for Renaissance country retreats.

Brocardo’s travels and subsequent residency in Beccadelli’s Ragusan villa reflect the Venetian and Italian passion for travel, for reading about wondrous foreign places, and for living a salubrious life in a proper villa that
possessed all the characteristics of a classicizing villa even as its garden features began to reflect the appeal of the exotic. His mission to Egypt was neither primarily business nor political but rather a touristic *viaggio*. In turn, his travels may have been inspired by accounts from earlier travelers such as Caterino Zeno, Luigi Roncinotto, Leandro Alberti, and Andrea Navagero, even if his ultimate purpose differed from theirs. Regardless, Brocardo found himself faced with relics of a distant past amid the delight and dangers of Alexandria and Cairo. As a trained observer, Brocardo was a careful recorder and student of the antiquities and wonders of Egypt. As he traveled he followed a general tendency to compress ancient, modern, Islamic, and Roman. In the process, he surveyed agricultural territory and enjoyed pleasure gardens that offered desirable exotic possibilities for the new gardens of Renaissance Italy. Sketchbook in hand, the painter returned to Ragusa primed to support the creation of a delightful retreat even as his patron, Cardinal Beccadelli, was effectively in exile on the wrong side of the Adriatic.

Conclusion

By way of a conclusion, I would like to introduce an important concept that connects the traditional merchant economy of Venice with the increasingly valuable transformation of the republic’s mainland into a booming agricultural hinterland. Venetian merchants have rightly been recognized for their daring exploits in the establishment of contact between Europe, the Near East, Africa, and the Orient. Marco Polo’s years in the Far East set the stage for generations of businessmen whose acumen and pragmatism made their city the central marketplace of the medieval Mediterranean. The constriction of Venetian trade under the pressure of the Turkish expansion and the Portuguese discovery of more direct routes to the Spice Islands of the Far East may have been overstated, but there is some truth in the idea that the Venetians were cognizant that attention to the *terraferma* might compensate for future decline in trade.68 One intriguing new avenue for scholars is a connection between the two main streams of Venetian income as part of a more symbiotic experience in which international trade and local or regional agricultural real estate both became important parts of a Venetian portfolio. In other words, study of Venetian business and travel, policy and politics, and investments in land and agriculture reveals their dynamic responses to changing circumstances, shaping their increasingly dominant investments in farmland and villas with input from their own or their peers’ encounters with the Islamic landscape. Thus, the small suburban villas of Domenico Priuli and Andrea Navagero on Murano, and the larger enterprises in the rural provinces owned by these men and by younger generations, including Ambrosio Bembo, were at the forefront of a movement to change the Venetian economy even as these men retained a historic bond with the distant lands traveled by Venetian traders, warriors, and diplomats.

Where the *viaggiatori* of the fifteenth and sixteenth centuries contribute to our better understanding of Venetian early modern culture is through their observations, made in the course of voyages undertaken in the footsteps of generations of Venetian traders and ambassadors. These observations influenced the form of the territory that would later supplant trade as the basis of Venetian wealth. Ambrosio Bembo, Andrea Navagero, and others did not write in a vacuum but rather as members of a group of exceptionally keen observers. These men and their peers were contributors to a surprisingly catholic Venetian vision of a world which seemed to grow in complexity every

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moment. Although the Palladian typology has a strong grip on the architectural record and our sense of Venetian villas, it is wrong for us to picture a reactionary Venice grasping at the straws of Roman villa culture in the face of a downturn in international trade. In fact, the early modern Venetian did not portray or consider his republic as a state or society in eclipse. For Venetians, the villa offered a new horizon and its lands new profits. To take full advantage of their investment in their mainland provinces, the terraferma, the Venetians clearly wished to learn as much as was possible to know about villa life and agriculture. As a result, they searched far and wide for new solutions and old alternative types that then came together in resplendent Renaissance complexes of villa buildings, pleasure gardens, and agricultural holdings.

NOTES

1. Ambrosio Bembo, Viaggio e giornale per parte dell’Asia di quattro anni incirca fatta da me Ambrosio Bembo nobile Veneto (1676). A manuscript copy is held in the collection of the James Ford Bell Library at the University of Minnesota, and there is a richly annotated transcription edited by Antonio Invernizzi (Turin: cesmeo, 2005). See also Clara Bargellini, The Travels and Journals of Ambrosio Bembo (Berkeley: University of California Press, 2007).


5. Giosofat Barbaro (1413–1494) was a member of the prestigious Venetian Barbaro family and enjoyed a career as a diplomat, merchant, explorer, and travel writer. From 1436 to 1452 Barbaro traveled as a merchant to the Genoese colony of Tana on the Sea of Azov. Luigi Roncinotto was the overseer and agent in Egypt and Syria for the Venetian nobleman Domenico Priuli in the first half of the sixteenth century. He produced accounts of his travels in Egypt, the Arabian Peninsula, Persia, the Crimea, India, and Sumatra, which he visited between 1529 and 1532. He sailed to Calicut or Kozhikode in India from Lisbon in 1532 on a caravel captained by Andrea Colombo, the nephew of the famous Christopher Columbus. Andrea Navagero (1483–1529) was a Venetian author and ambassador whose contributions to intellectual life included his erudite edition of Quintilian’s Impresa contra Portoghesi (Venice: Aldus Manutius, 1543).


7. Xenophon’s Cyropaedia or Education of Cyrus, composed in the fourth century B.C.E., was popular in the Renaissance and was connected to the genre of works known as “mirrors for princes.” On Cyrus and Xenophon, see also Annalisa Tessarolo, “Socrate, Alvise Cornaro, Andrea Palladio . . . Virtù dell’agricoltura nella tradizione economica,” Studi veneziani 30 (1995): 153–65.

8. Manfredo Tafuri, Venice and the Renaissance (Cambridge, Mass.: MIT Press, 1989), 281. There is no documentation for these early voyages north. The Zeni were high-ranking members of the mercantile elite who had also served in the Venetian admiralty. They disappeared from the archival records after a falling out with the Senate.


21. Sansovino, Gl'annali tvrcheschi, 1237/1244. The Republic of Ragusa consisted of the eastern littoral of the Adriatic, the Dalmatian coast, and a number of islands.
22. Gravosa is the name for the bay north of the Dalmatian city of Dubrovnik, known in the early modern period as Ragusa. Adrianople or Edirne is located near the Greek-Bulgarian border in northwestern Turkey. Although the Republic of Ragusa was nominally independent after 1526, when it was no longer under Hungarian control, the Turkish expansion across the Balkans and a corresponding decrease in Venetian influence in the region apparently prompted Sansovino to characterize Ragusan territory as “Turkish.” The wooded coast of the bay of Gravosa was thickly populated by waterfront residences during the sixteenth century. On Ragusa and villa culture, see Joško Belmaric, “Renaissance Villas on the Dalmatian Coast,” in Quattrocento Adriatico: Fifteenth-Century Art of the Adriatic Rim: Papers presented at a Colloquium Held at the Villa Spelman, Florence, ed. Charles Dempsey (Baltimore: Johns Hopkins University Press, 1996), 103–22; Nadja Gujic, “Les villas de Dubrovnik aux xve et xvié siècles,” Revue de l'art 115 (1997): 42–51; Cvito Fiskovic, “Le ville Ragusee,” Arte Veneta 32 (1978): 68–72.
24. Andrea Gritti (1455–1538) was a distinguished Venetian noble who was elected doge in 1523. He spent much of his early life as a merchant in Constantinople and other eastern cities, returning to Venice in the late 1490s. In 1509 he became a military provveditore or supervisor, and in 1510 he commanded the Venetian army in the war with the League of Cambrai.
26. Ibid., iv.
27. Viaggi fatti da Vinetia.
29. Viaggi fatti da Vinetia, 2r.
34. Viaggi fatti da Vinetia, 33v/64.
35. Numerous cities named Selucia were founded during the Hellenistic period by King Seleucus (Seleukos) after he took control of a region encompassing Cilicia, Syria, and parts of modern Iraq. The most prominent of these were the coastal city in Cilicia, Antioch’s port city of Selucia in Pieria, another near the mouth of the Orontes, and Selucia on the Tigris, located approximately seventeen miles from Baghdad. The last is most probably the site visited by the anonymous author.
36. The Churco may be the Tigris, the river flanked in antiquity by the earlier city of Selucia and the newer city of Ctesiphon. In addition to the Tigris, which has changed its course and no longer runs between the ruined cities, at least two canals connected Selucia with the Tigris and the Euphrates. The Venetian merchant’s discussion of the waterworks and the irrigated landscape suggests that he may also have been looking at one of these manmade canals, particularly since the Brenta had been redirected and resembled a canal more than a natural river. On Selucia, see

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37. Hopkins, Topography, 28–29. Located in the southern half of Seleucia, the Hellenistic theater was located on the major caravan road through the city, roughly opposite one of the two agoras. In 1928 and 1929, the Michigan excavations at Seleucia uncovered the baked-brick piers of the theater and portions of the stage.


41. Vincenzo Zanetti, Guida di Murano e delle celebri sue fornaci vetrarie (Venice: Antonelli, 1866), 280.

42. Livio Sanuto, Geografia dell’Africa (Venice, 1588; facs., Amsterdam: Theatrum Orbis Terrarum, 1965) (BNM 296.C.48).

43. The Venetian tendency “toward reportage—eyewitness description pure and simple” has been discussed by Fortini Brown, Sanuto, Antiquity, i.

44. Sanuto, Geografia, i.

45. Ibid.

46. Ibid., iv.

47. The distinction between geography and chorography revolves around the visual or verbal elements used to identify a specific place. Sanuto’s Geografia was published with maps of the areas discussed in great detail in his text, but he makes it absolutely clear that the verbal or written component of his description of Africa is an equally important part of this new description.


49. Ibid., 108.

50. Ibid., 120–23, 94–99.


53. The possible transfer of ideas from Venice to Rome and other Italian centers is discussed in chapter 5 of Pastore, “Expanding Antiquity,” 443–73.


55. Navagero’s letters indicate that he worked closely with gardeners at his suburban villa on Murano. Although his comments appear to ask for specific plantings and changes to the garden, no sources suggest that he himself wielded a shovel or labored even occasionally on any of his gardens. Pastore, “Expanding Antiquity,” chap. 2, 132ff.


60. Ibid., 33.


62. For the most complete treatment of Beccadelli’s years in Ragusa, see Nadja Aksamija, “Between Humanism and the Counter-Reformation: Villa and Villeggiatura in Renaissance Ragusa” (Ph.D. diss., Princeton University, 2004), esp. chap. 3, “Commemorating the End of an Era: Lodovico Beccadelli’s Villa-Memorial on Šipan,” 78–145.


64. Fragnito, In museo e in villa, 21.

65. Ibid., 22.

66. Tucci, “Pellegrino Brocardo.”


68. Charles Corn, The Scents of Eden: A History of the Spice Trade (New York: Kodansha International, 1999), 4–5. Corn discusses the Venetian role in the development of the spice trade with the Far East and argues that the Portuguese were “urged on by the dictum ‘Whoever is lord of Malacca has his hand on the throat of Venice.’” As proof of the devastating effect on Venice, Corn cites Girolamo Priuli, who wrote in his journal in July 1501 that losing control of the spice trade “would be like the loss of milk to a newborn babe.”
Rome and Istanbul both manifest rich garden cultures that underwent extensive development in the course of the fifteenth and sixteenth centuries. Not only did an increasing number of garden pavilions or kiosks become focal points in the urban fabric, but the city, palaces, gardens, and surrounding landscape were interwoven in a growing network of sites bound together by the cultural practice of maintaining a country retreat, called *villeggiatura* in Italian and *binis* and *göç* in Turkish. Daily excursions or seasonal retreats to residences where popes and cardinals or sultans and grand viziers would find pleasure, peace, and relief from the burden of business were a common practice, whether by boat to the imperial gardens along the Bosphorus or by riding to the suburban centers of villa culture surrounding Renaissance Rome. These concurrences raise the question of potential cross-cultural effects that may have been involved in the process of forging distinctive traditions of garden design in the early modern period.

With regard to the state of research, however, the total absence of comparative studies up to now is striking. There are various difficulties when we start to investigate from scratch the mutual influences of these two kinds of garden culture. First, the design of fifteenth- and sixteenth-century Ottoman gardens has not yet received the same international scholarly attention as that of their Italian counterparts. Attempts to reconstruct the layout and condition of pivotal examples at specific points in time are scarce. Likewise, fundamental studies on the evolution of garden terminology that would allow a more objective comparison with contemporaneous trends have yet to be undertaken. Moreover, Ottoman gardens are generally considered a special case within the field of “Islamic” garden art. They have been described (by Necipoğlu and Atasoy) as rather informal—that is, less regularly structured by architectural elements, because most of them lack examples of the so-called *chaharbagh* (four gardens).
system, the quadripartite garden concept with crossed water canals, which was generalized as the archetype of the “Islamic” garden.3 Strictly speaking, of course, there can be no doubt that Istanbul’s gardens may be labeled “Islamic,” as the Ottoman Empire reached its apogee in the sixteenth century, taking on a leading role in the Islamic world.

The statement that Ottoman gardens in early modern Istanbul were less formal compared to other (traditional) Islamic garden types is partly explained by the different climate there, which makes extensive irrigation dispensable.4 The city’s natural conditions are much closer to those in Mediterranean Italy. Nevertheless, this aspect has not triggered a thorough search for common ground in Italian and Ottoman approaches to the art of gardening. While there has been little detailed study of the ordering principles and contemporary perception of order in Ottoman gardens, scholarship on comparable Italian gardens has long focused on the geometrically organized core of villa garden concepts, neglecting the wider context of informal park areas and the agricultural landscape in which these parts were originally included. This may have contributed to the general opinion that a main distinguishing mark of these two traditions of garden design is their combination of an informal and a formal nature.

Such a simplifying assumption is strengthened by the discrepancy in the visual sources (evolving from different viewing habits): Western villa garden views generally tend to dissimulate irregularities and stress the overall geometric idea of the layout according to a predilection for a central perspective which privileges an ideal point of view, while in Ottoman miniatures imperial palace gardens are represented according to a taste for a virtually “cubist” perspective, with changing focal points and the reductive accentuation of exemplary elements.5 Scholars concerned with Islamic art and architecture (such as Necipoğlu and Golombek) have hinted at the possibility that the strict geometric order and the straight axes employed in new garden designs of the Italian Renaissance may have been influenced by the example of the Islamic chaharbagh.6 But given that the latter is a rare feature in Ottoman Istanbul, it can hardly be used as a viable starting point here. What distinguishes the Ottoman from other Islamic garden types is its fusion of Turco-Islamic elements with Byzantine ones, which perpetuated the Greco-Roman villa tradition. Gülru Necipoğlu concluded her article on villa culture in sixteenth-century Istanbul with the suggestion that the capital’s “informal” gardens must have presented an even closer affinity with ancient Greco-Roman prototypes than the “formal” gardens of the Italian Renaissance, which re-created the classical villa by imposing geometric order and axial symmetry.7 Questioning this opinion serves as the starting point for the following line of research. The aim of this chapter is to develop a comparative frame for studying the problem of cross-cultural effects involved in creating gardens in Renaissance Rome and Istanbul. It proposes to discern more similarities in the two traditions of garden design, and hence potential mutual influences, by taking a closer look at the use of examples from antiquity. This entails a competitive aspect that can be explored in terms of a dialogue of civilizations.

Developing a Comparative Frame

Beyond doubt, the gardens of Rome and Istanbul lend themselves very well to a comparison against the backdrop of the reception and appropriation of antiquity, that is, the extent to which they draw on a common cultural heritage, including role models known through literature, as well as the handling of material relics. Both the western and the
eastern Rome (Constantinople) had lost their competing splendor in the mid-fifteenth century. With the conquest of Constantinople, the title of Roman emperor, and with it the imperial claim to power and to the incorporation of European territory, had become accessible to Ottoman rule, enabling the empire to rival the French, Habsburg, and papal crowns. In this new competitive context, both Romes were to be resurrected from their ruins in order to represent a powerful image of the world's capital of the true faith. The success of these efforts peaked in both cities in the second half of the sixteenth century. It is therefore especially interesting to consider the strategies employed to regain and surpass the ancient size and significance of these two pearls of Roman civilization in order to create what in this context may be called a new Christian and a new Islamic Rome.8

The architectural historians Gülru Necipoğlu and Hubertus Günther have already proposed considering the reception of a shared Romano-Byzantine heritage and the implicit competition for magnificence (both with antiquity and with the enemy) as an important concurrent impulse behind the florescence of both Italian and Ottoman architecture.9 Possible influences on the development of domed central plans in sacred architecture, such as the unmatched models of Hagia Sophia and of the Pantheon, have been at the center of their attention on that score. But in trying to distinguish Islamic Ottoman from Christian Italian approaches in forging a New Rome that would merge “the grandeur of the faith with the monumentality of the past”10 (Necipoğlu), it should also be asked what role gardens may have played in that process. Early modern villa gardens are a demonstration of the essence of one’s respective culture, order of society and knowledge, beliefs, and political power. Although a certain awareness of the other and mutual stimulation are to be expected, it is improbable that much tangible evidence will be uncovered—for instance, explicit formulations of influence. As enemies in times of political tension and the imminent threat of war, Italian Christians and Ottoman Muslims must have been eager to learn more about each other’s respective assets and weaknesses, their cultural differences and similarities.11 The embassies of Venice, France, and the Habsburg Empire—permanently established in Istanbul since the 1530s—and the network of spies facilitated a growing and continuous flow of information.12 However, despite an increase in diplomatic correspondence and travelogue writing, the information flow was mostly oral (especially on the Ottoman side).13 The knowledge gathered was used for military, polemic, or representative purposes in a transformed mode. And, most importantly, the perception and characterization of the other was led just as much by curiosity as by prejudices and negative rhetoric.

This chapter draws on the notion of “civilization” and uses the term “civilizing elements” as a descriptive category to indicate similarities and differences in Muslim Ottoman and Christian European approaches to the art of the garden. “Civilization” is referred to not only in the broad sense of culture, but more specifically, with regard to its etymological origin, the Latin civis (citizen), and to the idea of the Roman civitas (city) as a state of refinement and progress of humanity that is to be regained or appropriated and improved. The art of the garden is, of course, always an expression of civilization in the broad sense of culture. But it can also play an important role in showing off cultural superiority. The discourse on the progress of humanity was flourishing in the sixteenth century, most notably since the so-called scientific revolution from the 1550s onwards. It is closely connected with a historicization of the relationship of man (and his art) with nature—a topic whose conscious orchestration may be observed in villa and palace garden designs of the day. While this phenomenon is still generally
treated as a Western concept, it may nonetheless be discovered in other “civilizations.” Similarly, the contrasting juxtaposition of “barbarian” versus “civilized” (educated, superior) cultures can already be detected in written sources dating back to this period—although the noun “civilization,” charged with the notion of superiority of reason and morals, did not come into use before the second half of the eighteenth century. Ogier Ghiselin de Busbecq, ambassador of the Holy Roman Emperor at the Sublime Porte (1554–62), clearly applies this rhetorical opposition in his first Turkish Letter of 1555:

I had a delightful excursion, and was allowed to enter several of the Sultan's country-houses, places of pleasure and delight. . . . I also saw numerous parks belonging to the Sultan, situated in charming valleys. What homes for the Nymphs! What abodes of the Muses! What places for studious retirement! The very earth, as I have said, seemed to mourn and to long for Christian care and culture. And even more so Constantinople itself; nay, the whole of Greece. The land which discovered all the arts and all liberal learning seems to demand back the civilization which she has transmitted to us and to implore our aid, in the name of our common faith, against savage barbarism. But all in vain; for the Lords of Christendom have their minds set on other projects.

Sinan, the chief architect to the sultan, who codified the classical Ottoman style of architecture in the second half of the sixteenth century and who was also responsible for renovations and new designs of the imperial gardens in Istanbul, would hardly have agreed with Busbecq. He employed his skill to civilize the Ottoman Empire, which hit its peak of magnificence under his care. He was even self-confident enough to leave several versions of his autobiography for posterity. His close friend the poet Mustafa Sâi Çelebi put them into literary form. In one of these, the Choice Gift of the Architects (Tuhfetü'l-mi'mar, before 1588), Sinan uses the same rhetoric as his colleagues in the West to introduce and promote his art and to put it into a historical perspective: “It is obvious and proven to men of intelligence and wisdom and persons of understanding and vision that building with water and clay being an auspicious art, the Children of Adam felt an aversion to mountains and caves and from the beginning were inclined to cities and villages. And because human beings are by nature civilized, they invented day-by-day many types of buildings, and refinement increased.”

Furthermore, the different versions of his autobiographies show that Sinan was especially proud not only of his sacred buildings, but also of his achievements as a water engineer and garden designer. Choice Gift of the Architects specifies garden pavilions, for instance, as a particular building type, and the Record of Construction (Tezkiretü'l bünyan) puts a special emphasis on anecdotes relating to the irrigation and embellishment of the sultan's gardens and on water engineering for the benefit of the public. In general, the growing appreciation for the civilizing force of the art of the garden was perhaps best formulated by a Westerner in the early seventeenth century; in the famous opening words of his essay “Of Gardens” (1625), Francis Bacon extols the art of the garden as the fulfillment of the art of building, and thus a marker of the peak of a civilized society: “God Almighty first planted a garden. And, indeed, it is the purest of human pleasure. It is the greatest refreshment to the spirits of man, without which, buildings and palaces are but gross handiworks. And a man shall ever see that when ages grow to civility and elegance, men come to build stately, sooner than to garden finely—as if gardening were the greater perfection.”
The comparative perspective opened up in this chapter seeks to demonstrate that gardens in Rome and Istanbul could intentionally stage the superiority of their owners’ civilized existence—and thus be situated in a competitive international and intercultural context—and that the revival, appropriation, and surpassing of a common ancient heritage was instrumental for this purpose. Hence, it is necessary to concentrate on a few paradigmatic examples of princely palace and villa gardens which may be classified as a deliberate reflection of the political system, social hierarchy, and ethical values of their owners’ cultures, and which clearly set the highest standard in the given tradition of garden art. In Istanbul this is without doubt first and foremost the Topkapı Sarayı (864–83 A.H. /1459–78 under Mehmed II, extensively renovated under Suleiman I in the following century). Some other imperial gardens that should also be considered are the Tersane Bahçesi (later Aynalikavak Garden, built soon after the Conquest), the Kuleli Bahçesi (c. A.H. 926 / 1520), the Sultaniye Bahçesi (c. 930s/1520s), and the garden of the statesman Karabalı (c. A.H. 926 / 1520), which constitutes the only known example of a chaharbagh in sixteenth-century Istanbul. A comparative sample in Rome comprises the Papal Palace on the Vatican Hill (especially the Belvedere project, begun by Julius II and his architect Bramante in 1506 and completed under Pius IV and his architect Ligorio in 1565), the Villa Giulia of Pope Julius III (1550–55), the paradigmatic Villa d’Este in Tivoli (1550–72) of Cardinal Ippolito II d’Este, and contemporary villas challenged by the innovations of the last, such as the villa of Cardinal Gianfrancesco Gambara (now Lante) in Bagnaia (1566–97).

In this comparative perspective the term “civilizing element” is applied to everything that orders nature in palace and villa gardens and puts nature in a narrative context and relationship to man, its cultivator: the order of planting, formal architectural elements, the use of ancient spolia (ruins) and of water, and even the organizational structure of the manpower employed to build and cultivate these gardens. Finally, the common background from which both cultures drew inspiration in order to surpass themselves and each other in magnificence should be divided into two main categories: ancient models known from literary topoi and those known from archaeological evidence. Both could be used to demonstrate a superior state of civilization and thus communicate the legitimacy of the claim to universal power. The resulting distinctive cultures of garden design show phenomena of both appropriations and rejections of the rival’s culture. The following section aims to distill some of these similarities and differences. Using the described comparative set of prominent garden examples, aspects of the “civilizing elements”—planting, architecture, spolia, water, and manpower—will be taken into consideration.

Civilizing Elements

*Planting*

When Mehmed II (1432–1481) conquered Constantinople in 1453, he ended his triumphal entry into the city—according to the Turkish Ottoman historian Tursun Beg—by mounting the cupola of Hagia Sophia in order to view the ruined city from above and to contemplate the hazards of fortune. This was a sophisticated symbolic gesture, given the old panegyric tradition widely diffused since the diegesis that extols the Hagia Sophia as a symbol of global dominance. Facts and myths about its creation are closely intertwined. The Roman emperor Justinian is said to have built it with materials from all regions of his empire and with the help of Christ and his angels. Its plan was considered to be of divine origin, like that of the Temple of Solomon. The

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Great Turk had decided to communicate his new status as the “Sultan of two Continents and the Emperor of the two Seas” and his intentions for a continued policy of expansion by launching an “Ottoman Renaissance” (as Günther would call it). He took the title of Qaysar-i Rum (Roman emperor), he kept the name of the city (Konstantiniye), and he put his plans for its reconstruction into action. One of his acts was to command that a garden should be created at the very spot of the first encampment to be set up for the siege of Constantinople: the former vineyard would become the Tersane Bahçesi. This is stated by Evliya Çelebi (1611–1682), the famous Ottoman Turkish traveler, who was born in Istanbul and was the first native inhabitant to extensively describe the history of the city’s gardens, in the first volume of his Book of Travels (Seyahatname):

Tersane Bahçesi, the sultan’s private garden on the shore near Hasköy, was formerly a royal vineyard in the time of the infidel sovereigns. After the conquest, Mehmed II, who first set up his tent here and divided up the spoils of war among his commanders, liked the place and gave orders for a garden to be built here with kiosks, pools and fountains. One could faint from the sweetness of the scent from the twelve thousand cypress trees laid out in a chessboard pattern here. The garden was adorned with thousands of fruit-trees, plane trees, weeping willows, box and pistachio trees, which shaded it from the sun. Fountains gushed with water night and day like springs in the Garden of Eden.

So, according to Çelebi, the most striking elements of one of the first Ottoman gardens in Istanbul were kiosks, pools, fountains, and trees; in particular, an enormous number of cypress trees was ordered in a strict geometric pattern. Furthermore, he relates that the sultan planted seven of these trees with his own hands. This alludes to another well-known story, that of the ancient Persian prince Cyrus the Younger, who is described in Xenophon’s Socratic discourse Oeconomicus as not only a superbly skilled warrior but also a dedicated gardener. The prince is said to have designed his paradise at Sardis all by himself and to have planted trees there in much-admired regularity—some with his own hands. Mehmed was very familiar with stories like this one because every day two Italian courtiers read to him from the ancient Roman histories, as well as the chronicles of the popes, emperors, and French kings.

The illustrious example of Cyrus was also followed in the West. When Giuliano delle Rovere (1443–1513) became Pope Julius II in 1503, he immediately revealed his great ambition to imprint a renewed air of magnificence on the urban fabric of Rome. Thus demonstrating a new Caesar’s image of earthly and spiritual power, he continued the yet unfulfilled ambitions of his humanist predecessor Pope Nicolas V (1397–1455), who had begun the renewal of old Rome at the time of Mehmed’s conquest of Constantinople. Julius II not only planned to build a new Saint Peter’s with the help of his architect Bramante, but also decided to link the papal palace with the little villa of Pope Innocent VIII (1484–1492) in the Vatican gardens. The topmost part of the project, the secret garden next to the Belvedere building of Innocent VIII, was to become the statue court, which played a most important role in promoting the emerging type of archaeological gardens in Rome. There a panegyric program was developed to praise Julius II’s reign. The Venetian envoy to Rome, Girolamo Donato, who visited the statue court in April 1510, noted that upon his arrival the pope was demonstratively “planting his garden” here—he planted orange trees, as is known from other descriptions of the site. The courtyard would be compared by poets with the Garden of the Hesperides, the site, according to Greek mythology, of
a single tree or a grove bearing the golden apples that were said to grant immortality. The oranges in the Vatican’s statue garden court were thus turned metaphorically into “golden apples,” the fruits of Pope Julius II’s wise government serving the true faith and leading to immortal life in paradise.31

The accomplishment of a similar symbolic act is attributed by Evliya Çelebi to Suleiman I (1494–1566), known as “the Magnificent” in the West and as “the Lawgiver” in the East, under whose reign (1520–66) Ottoman imperial splendor reached its apogee. Like his great-grandfather, the “Solomon” of the golden age of Ottoman rule was very fond of villa culture.32 When he became sultan in 1520, he is said to have planted a cypress tree in a garden that would become known as the Tower Garden (Kuleli Bahçesi) because he also built a high tower pavilion there: “Suleiman I had a palace with a nine-storey tower rising to the sky like a fortress built at Kuleli Bahçesi where he had been concealed and brought up. It was a paradise. On every floor there were fountains and pools and innumerable rooms. Because of this tower the place became known as Kule Bahçesi. In the garden here was a cypress planted by Suleiman himself. Whoever saw it admired God’s handiwork as it was so green and straight with not a branch out of line.”33 As in the case of Mehmed II’s Tersane Bahçesi and Julius II’s Hesperidian statue garden, Suleiman I’s documented tree planting is connected to a site that has a crucial significance for his life and reign: according to Çelebi’s narrative, Suleiman’s father, Selim I, fearing a possible takeover, had ordered the chief gardener (who also functioned as executioner) to put the young prince to death. But the chief gardener executed another youth and hid the real prince at Kuleli Bahçesi. A few years later, when the sultan regretted his decision, the chief gardener revealed his action and brought the prince back to court, where he was affirmed as the next sultan.

These examples show that the sovereign’s act of planting a tree was considered an important practice for building up a new ruler’s image and that it had symbolic significance. It is a sign of personal advancement and—in line with the ancient example of Cyrus—demonstrates good governance. On that score, the choice of tree species is not coincidental, but used to forge a cultural identity. The cypress is one of the most important elements of Ottoman gardening. It is a symbol of Ottoman virtue. The cypress trees in Tersane Bahçesi are planted in a regular order that may be associated with the order of his soldiers lined up before the conquest of Constantinople.34 The hint that Suleiman’s cypress was “so green and straight,” and the fact that it is a solitary tree standing alone, were most probably seen in analogy to the sultan himself as a protector of the true faith. For it alludes, even more than to Cyrus, to the example of the Prophet, who, according to a Zoroastrian legend, is said to have planted a cypress tree in Khurasan by himself.35

One of the most typical elements of Italian Renaissance gardens is, by contrast, citrus trees. Representing the mythological “golden apples,” they could become a widespread symbol of universal sovereignty specifically associated with Christendom. Their use and poetic interpretation in the Vatican’s Belvedere certainly contributed to the growing popularity of “golden apple” species as a main feature of Italian gardening. But the enemy’s view of the West supposedly also played a role in turning them into a prominent sign of cultural identity. In the Ottoman perception, the “golden apple” (kızıl elma) was well understood as a sign of universal dominion and, specifically, as a symbolic allusion to Western centers of power (e.g., Vienna, Rome) to be conquered.36 Mehmed II had actually introduced the imperial apple motif into the enthronement ceremony of the Ottoman court. Referring to the legend of Alexander the Great, who is said to have had an apple of the gold from
his tribute-paying provinces, the Janissaries were supposed to shout, “Let us meet at the golden apple!” when a new sultan was invested with the sword of state—thus expressing their commitment to conquering Christendom. The Ottoman use of the golden apple symbol was manifold and well noticed in the West. All these details suggest that the demonstrative use of examples from antiquity influenced the planting habits and the attribution of meaning to specific plants in the gardens of Rome and Istanbul.

Architecture

After Mehmed II had rivaled the divine Hagia Sophia with the imperial mosque that he erected on the site of the Church of the Holy Apostles, “his exalted will desired the following: that he create a new palace according to his own independent invention”—one that “should outshine all and be more marvelous than the preceding palaces in looks, size, cost and gracefulness,” as Tursun Beg and the Byzantine historian Kritovoulos report. This magnificent New Palace was built on the most prestigious and representative site of the city, the promontory overlooking the Golden Horn, the Bosphorus, and the Sea of Marmara, the site of old Byzantion, next to Hagia Sophia and the Great Palace. The site incorporated not only remains of the Byzantine acropolis, but ancient spolia from all over the city, and the Christian chapels lying within its precincts were converted to other uses. According to Necipoğlu,
the Topkapi Palace was conceived as a sort of museum, a “microcosm in which rare plants, animals, and minerals . . . were gathered from different parts of the empire” as a “microcosmic vision of universal empire.”40 The structure consists of a succession of three courtyards linked by portals, which is surrounded by a vast area of outer gardens (a park and vineyard area), all enclosed by a wall (fig 3.1). The inner core (the two courts with the main residential and administrative buildings) was built between 1459 and 1468, while another forecourt was set in front of it and pavilions built in the outer gardens between 1468 and 1478. The layout and organization of the palace reflected the military and administrative order of the centralized Ottoman state, and its basic structure remained untouched by Mehmed’s successors. The most important renovations were undertaken by Suleiman I; new garden kiosks in the classical Ottoman style were built and the water system was renewed and enlarged in order to adapt the palace to the needs of the sixteenth century. Not only the surrounding area but also the successive courtyards were understood from the outset as parts of a paradisiacal garden in which the felicitous sultan dwelled. A Qur’anic inscription on the first gate (above the foundation inscription) puts it in the context of a threshold of paradise.41 In this architectural frame was staged a new court ceremonial that Mehmed II had invented on the basis of traditions at Byzantine, Arab, and Persian courts, and from which he extracted the common idea of secluding the prince to create an aura of sanctity—a concept that would not only be followed but carried to excess by his descendants in the second half of the sixteenth century.42

This ceremonial imposed a strict processional sequence on visits by foreign diplomats: coming along the old Byzantine triumphal street from Hagia Sophia, one passed the first gate, called the Imperial Gate (bab-i humayun), and entered the first courtyard, the Court of Processions (alay meydani). There one followed a paved path, which offered a glimpse of the outer gardens on the sides, to the second gate, where everyone had to dismount. This portal was known as the Middle Gate (bab-i miyane) and the Gate of Salutation (babü’s-selam). It opened to the second courtyard, a garden court with trees, animals, and fountains that contained the main administrative buildings. The main and final attraction was the third gate, called the Gate of Felicity (babü’s-saade) or the Sublime Porte (bab-i ali), which separated the public space from the private residential area of the sultan and his household. If a visitor was granted an audience with the sultan, he would be led to the Chamber of Petitions, located just behind the threshold of the third courtyard (fig 3.2).

The French antiquarian Pierre Gilles described this audience space in the mid-sixteenth century as a “structure . . . surrounded by a portico supported with spiraled columns of rare marble, their capitals and bases entirely gilded.”43 Through the windows one could get an impression of the private hanging gardens in the third court.44 The playful references to the topoi of paradise and the Temple of Solomon with its spiraled columns must have been obvious to Western visitors. In any event, the procession from the Imperial Gate to the Gate of Felicity, and the fabulous panoptic view the sultan enjoyed from his private garden all over the city to the eastern and western parts of his vast empire, were the most famous elements of the Topkapi Palace known in the West.45 Consequently, the question arises as to whether its fame could have partly inspired the development of straight processional axes or vistas and concatenated courtyards in sixteenth-century Roman villa gardens, where we find the topoi of paradise and the Temple of Solomon exploited to the same degree. Equally open is the inverse question as to whether Western perception could have played a role in shaping the influential
processional sequence at Topkapı Palace in the last third of the fifteenth century.

Turning to the Italian examples, certain similarities to this aspect of the Topkapı Palace can indeed be observed. Bramante’s design for the papal Belvedere in the Vatican is based on models of Roman antiquity like the sanctuary of Fortuna Primigenia at Praeneste, which was believed to have belonged to Julius Caesar. Nevertheless, what it has in common with the seraglio of the Grand Turk is that it creates a linear sequence from the public to the private sphere through a succession of three courtyards surrounded by outer gardens (fig 3.3).47 Similarly, Pope Julius III had his Villa Giulia near the Porta del Popolo built in the form of three concatenated courtyards linked by loggias, all surrounded by a vast park area with fruit trees and vineyards (1550–55) (fig 3.4). The staging of a successive movement from public to private, from negotium (business) to otium (leisure), from city to
nature or vice versa, is also a main ordering principle of other important Roman villa garden designs created in that period, notably of the Villa d’Este in Tivoli (1550–72) and the Villa Gambara in Bagnaia (begun in 1566), though these later examples express the idea in new playful variations using an open terraced garden space rather than closed garden courtyards.48

As an ancient literary model for this organizing principle, the Table of Cebes could be proposed, a moral allegory of human life which describes man’s gradual progress from ignorance to wisdom and felicity.49 The “Picture,” which teaches the “Path to True Cultivation” in life, shows a space structured in three walled areas. It is supposed to resemble a city or military camp but is actually neither. At the innermost center and highest spot is situated the “Abode of Felicity”; whoever wants to reach this place from which everything can be seen and understood has to pass three successive portals representing stages of acquired knowledge in life. One Western architect who might have heard of the Greek text before its great revival in the sixteenth century, thanks to its many Latin and vernacular translations, was Antonio Averlino, known as Filarete (c. 1400–1469). The master of the bronze doors of Saint Peter’s (1445) had conceived an ideal center of learning in his Trattato di architettura (Treatise on Architecture) (1460–65).50 Since he dealt with the problem of finding an architectural form for “museal” sites, the Table of Cebes certainly would have been of major interest to him. After finishing his treatise, Filarete is assumed to have traveled to Istanbul in 1465.51

Similarities between the Mehmed Fatih mosque and Filarete’s design of the Ospedale Maggiore in Milan (included in his treatise) have been noticed.52 It is highly hypothetical but not impossible that he may have advised on aspects of the “museal” concept of Mehmed’s New Palace (which was in its early construction stage at the time) and that the example of the Table of Cebes could have been an inspiration. With more certainty it can be asserted that Pirro Ligorio (1512–1583), the antiquarian and papal architect who finished Bramante’s Belvedere project in 1565 and who designed the Villa d’Este in Tivoli, drew extensively on the ancient example of the Table of Cebes, which had become very popular at the time. The straight central axis he conceived for the Villa d’Este leads toward the central dining room of the palace on top of the hill, on the walls of which are painted the spiraled

33 Etienne Dupérac, Dizzeeno del Tornaimento fatto il lune di Carnovale in Roma nel Theatro Vaticano (Tournament in the Belvedere Court), 1565. Etching and engraving. Published by Antoine Lafréry. © Trustees of the British Museum.
marble columns of Solomon’s Temple. His visualization of a
civilizing path to True Cultivation and Felicity has Christian
overtones and was intended as a magnificent sign of the
power of the true faith represented by the Catholic Church.53
This statement most likely alluded both to the latter’s domes-
tic troubles with the Reformers and to the exterior threat
from the unbelievers, namely the Turkish Solomon sitting
behind his Gate of Felicity.

Another important strategy to demonstrate superiority
through architectural elements that should be mentioned
in this context was the use of foreign (garden) architectural
styles as signs of victory and sovereignty. This is evident
in the three garden pavilions that Mehmed II had built in
the surrounding park area of the Topkapı Palace: they were
designed in the Persian, Turkish, and Greek styles, thus
representing the cultural spheres the sultan had already
succeeded in incorporating into the Ottoman realm.54 And
the same motivation seems to have led to the adoption of
the Persian chaharbagh concept in the Karabali Garden
in Kabataş (fig 3.5). The fact that it contained a pavilion
where the battle of Sultan Selim I against Ismael I (1514)
was depicted suggests that the whole garden celebrated the
victory of the Ottoman Empire over the Persian king.55 Can
a similar intention be found in Italian Renaissance gardens?

Certainly, the very popular example of Hadrian and his
Tiburtian villa could be used as an appropriate ancient
model for this strategy demonstrated by the enemy: it was
well known that Hadrian had famous buildings of vari-
ous parts of his empire copied in his imperial villa. The
situation of territorial conquest was, of course, a different
one in sixteenth-century Rome. Nevertheless, this offers
another perspective on the introduction of water stairs in
Italian Renaissance gardens. It has long been assumed that
Islamic influences led the way to this solution for the prac-
tical problem of conducting water along a slope. Andrea

3.4 Ichnography of the courtyards of Villa Giulia. From Paul Letarouilly,
Edifices de Rome moderne ou Recueil des palais, maisons, eglises, couvents, et autres
monuments publics et particuliers les plus remarquables de la ville de Rome (Paris,

Navagero’s popular description of the water stairs at the Generalife of the Alhambra in Granada, Spain, is indeed very close to the form of water stairs that appeared as a new element of Italian garden architecture for the first time in the Villa d’Este in Tivoli (fig 3.6). Incorporating and developing the very architectural element that was clearly associated with the Moorish garden style of the Alhambra, situated in a territory that was reconquered for Christianity, might well have been intended (beyond practical reasons) as a demonstration of this victory and a statement against the enemy of the true faith in the East.

**Spolia**

Another interesting comparative category is the use of spolia, namely, the way the archaeological heritage was utilized. In both cities we find not only gardens built on ancient ruins, but also ancient columns, capitals, sarcophagi, reliefs, and statues used to adorn new gardens. Ancient spolia like the Goths’ Column and sarcophagi were displayed in the Topkapi Palace gardens. The foundations of the royal pavilion in the Sultaniye Garden, built near Beykoz in the 1520s, were covered with ancient Bacchic reliefs (fig 3.7). The garden is associated with Suleiman I’s grand vizier Ibrahim Pasha (1494–1536), who also put up the statues of Apollo, Diana, and Hercules (taken as spoils of war from Hungary) in the Hippodrome, in front of which he built his urban palace. When the “Westernizing” policy was abandoned after Ibrahim Pasha’s fall from favor and execution, the use of pagan imagery became thoroughly unpopular and was considered impious. Nonetheless, the material symbolism of ancient columns remained very important. This was also the heyday of archaeological gardens in Rome. Collecting ancient sculpture was a demonstration of adherence to the humanist ideal, the humanitas (which would develop into the term “civilization”) that Busbecq so sorely missed in the gardens of Istanbul in 1555. A most helpful source for illuminating this aspect, more specifically the European perspective on the situation in Istanbul toward the middle of the sixteenth century, is Pierre Gilles’s pioneering archaeological study of Constantinople. The French antiquarian was sent to the Ottoman Empire by Francis I in 1544 in order to acquire Greek manuscripts for the royal library. But after the king’s death, bereft of financial support, he was forced to enter the service of the sultan’s army. With the help of Cardinal Georges d’Armagnac he was liberated and joined the French ambassador Gabriel d’Aramon on his tour of the Levant in 1548. When he returned to Europe in 1550, he chose to join his patron Cardinal Armagnac in Rome. That was where, before his death in 1555, he wrote down the results of his extensive archaeological research in his four books on the antiquities of Constantinople. Hence, at the time when the most important Roman villa gardens displaying antiquities were conceived, there was excellent firsthand knowledge on the capital of the enemy available to antiquarians and collectors of antiquities. In De topographia Constantinopleos, Gilles constantly expresses his indignation about the disregard and destruction of ancient monuments and sculpture in Istanbul. Apropos the columns of the Hippodrome he writes,

One is made of Arabian marble. . . . On top of this the statue of Hercules was put up by Ibrahim Pasha, using spoils he had taken in Hungary. But after his death, the statue was pulled down by the Turks, the hostile enemies of statuary and even greater enemies of the whole art of Vitruvius than of Hercules. Hercules had not only wandered the world, vanquishing monsters while alive, but had even carried the dead here and there, escaping so many calamities, until at last he was
overcome. It was these Turks who vanquished Hercules with the proposition of the thirteenth labor, rather than those who first overcame him a long time ago. Likewise they had burned a Hercules made of wood, as the impious Diagoras did. Entering an inn and wanting wood with which to cook his lentils, he [Diagoras] found a beautiful, artfully made wooden Hercules and cut it up and built a fire, saying these words: O Hercules! He who underwent twelve labors, Go on! Suffer a thirteenth labor! Now you will cook lentils!  

Gilles vivifies his disgust regarding the religiously motivated iconoclasm of the enemy by evoking the affliction and death of Hercules. Hercules seems to have become a symbol
for Western civilization per se. Killed by the barbarians in Islamic Constantinople, he would be revitalized all the more in Christian Rome. Hercules, the hero who went to the garden of the Hesperides and obtained the golden apples, became a topic of growing iconographic importance in Roman villa gardens. The first garden monumentalizing and centralizing the Hercules theme was the Villa d’Este in Tivoli with its Fountain of the Dragon(s) (fig 3.8). There, elaborately restored ancient statues of Hercules surmounted a sculpture of a water-spouting dragon that made terrible sounds of war. The whole scene was set in a grove of golden apple trees in the center of the garden, accompanied by the impresa of the patron bearing the motto “ab insomni non custodita dracone”—a quote from Ovid’s Metamorphoses which informs us that Hercules, not the dragon, is now the possessor of the golden apples. It was completed in 1572, a year after the battle of Lepanto—visitors may well have perceived it in global perspective as a sign of the victory of Christianity and of the humanist attitude over all barbarian “enemies of statuary,” and over the Grand Turk, called the “insatiate dragon.”

Water

Water is another main “civilizing element” on which to focus. Besides its functional necessity for the creation of gardens, water played a preeminent role as an aesthetic cohesive agent of the art of garden design, and equally as a main agent in the process of restoring the magnificence of antiquity. (See the uses of chaharbagh and water stairs mentioned above.) It may be considered as the civilizing element par excellence. The restoration of the ancient aqueducts, the progression of hydraulic engineering techniques, and the building of new fountains were crucial in this process. Sinan placed an emphasis on his important role in building new water systems for the garden city of Istanbul (Süleymaniye system, c. 1550–57; Kirkçeşme system, c. 1564). In his Autobiographies, he reports at great length about advising Suleiman I on this matter and convincing him to take action. In the chapter “Concerning the construction of the heaven-resembling arches of [the aqueduct] that brings flowing water to the admired fountains of the city of Istanbul and the elegant works of charity of the Solomon of men and jinns, ruler of the world—may god’s blessing and mercy be upon him!” he states,

O Solomon of the age on the throne of felicity, this is The petition of this weak ant to the dust of your feet: May you show zeal that water again flows to the place where once it flowed! It used to flow to the gardens and meadows of Istanbul.

Moreover, water is constantly elevated on a metaphysical level; it turns the whole city metaphorically into paradise:

That heart-attracting channel and clear water Are exactly like the exalted Selsebil. That well-proportioned pool, round like the moon, Is like the pool of Kevser in the garden of Paradise.

The commendable situation of water supply in mid-sixteenth-century Istanbul was already noted by Gilles at the end of his book, where he mentions a few contemporary “buildings owned by the Turks.” He acknowledges—though almost unwillingly—that this emulation of ancient examples was what impressed him most about the “barbarian” culture of the enemy:

The sultans of the Turks have excelled in bringing water into the city. Likewise Eusebius particularly praises

Gardens of Rome and Istanbul  47
Constantine. . . . Valens and Andronicus built rivers at great expense and at a great distance from the city, in part on arches standing above ground, and in part in underground channels. With just as great expense a number of other emperors . . . constructed fishponds and underground reservoirs, called cisterns in later times, in every region of the city. But the enemies of Constantinople are now so far away that the Turks have either left the cisterns entirely to ruin or converted them to other uses. The city enjoys an abundance of water running from conduits leading from every suburban field, even remote ones. There is not a single famous mosque, public building, public hospital or decent bath that does not have a fountain in a central area. I will not discuss the grand houses of the Turkish nobles and pashas nor the sultan's palace, whose property, occupying old Byzantium, is always supplied with rivers that flow into it from outside the city. I will pass over their lakes and fountain houses everywhere in forums and streets, which are not only famously generous with water for them to drink but also drain away the city's sewage to the sea, and they carry away unhealthy air and the things that thicken the air, for which great cities are usually considered infamous.

Rome, by contrast, was infamous for its swampy air in the summer, a main reason for villeggiaturas. The urgent need for the restoration of the ancient aqueducts and a related project for a visionary new water-supply system were discussed in the 1530s. But the enormous costs of such undertakings seem to have inhibited their immediate realization. The situation changed in the 1550s, when the quality of the Tiber's water was disputed and Pirro Ligorio performed extensive research on the ancient aqueducts of Rome. The antiquarian and garden designer not only studied the respective archaeological evidence but also developed a complex exegetical approach toward water, highlighting its metaphysical qualities just as Sinan had. The fascinating display of yet unseen rushing masses of water at Villa d'Este propelled the transformation of Rome into a garden and fountain city, made possible through the restoration of the Acqua Vergine (1570) and the subsequent construction of the aqueducts. As it is also indicated in Sinan's autobiographies that he studied archaeological evidence in order to advance his skills for the extension of Istanbul's water supply systems, it would be desirable to search more thoroughly for possible vehicles of knowledge transfer between Istanbul and Rome concerning this concurrent development.

**Manpower**

It was often contact with gardeners that provided visitors with insider knowledge on the building history, function, and meaning of sites they inspected. Bribing the gardeners gained one access to Istanbul's private pleasure grounds. Gardeners or engineers in Rome, by whom being accompanied was a common mode of visiting villa gardens, could explain the hydraulic mechanisms and stories of famous fountains. Consequently, an important role may be attributed to them. Furthermore, the organization of the manpower used to create and maintain representative gardens can serve as an indicator of the social constitution of a specific culture. The core structure of the Ottoman state relied on the successful implementation of a slave system adopted from antiquity. The fact that young novice boys (acemi oğlanı) were chosen from among the Christian population of the provinces, converted to Islam, and educated in the palaces of the sultan, eventually starting out as gardeners and becoming high-ranking officials of the
administrative and military apparatus, was well known in the West. According, for example, to Bernardo Navagero’s *Relazione* of 1553, Suleiman I had two thousand novice boys in his twenty imperial gardens around Istanbul, eight hundred in the Topkapi Palace alone. Sinan, who was at the time about to become the most famous architect of the Ottoman Empire, had started out as such a novice, of Orthodox Christian origins. In Rome, in contrast, gardens were used intensely to realize the humanist ideal as an epitome of “Christian care and culture.” They served as sites to gather elitist academic parties, but also to educate a wider circle of people, as more and more gardens were opened to the public from the 1550s onwards. The papal statue court in the Vatican Belvedere had been a role model for this development. Slave labor nevertheless seems to have been (like pressed labor) a common practice in sixteenth-century Italian gardens as well, a cheap way of getting heavy and intensive work done, but not a means of systematic social integration offering chances of moving up in Christian society.

A rather peculiar occurrence with which to close this set of examples of possible cross-cultural effects in the gardens of Rome and Istanbul points back to the Villa d’Este once again. The Tiburtian historian Giovanni Maria Zappi relates that its patron, Ippolito II d’Este, had brought fifty “Turkish slaves” (*schiavi turchi*) to Tivoli and made them work in his villa. He further reports that in May 1564 these slaves rebelled against their custodians (throwing them into a fountain) and managed to escape—whereupon the cardinal bought fifty new “Turkish slaves” in Venice to replace them. Further proof has been found in an archival document according to which a certain Giovanni Antonio de Grassi da Fano, who had been a slave of the Grand Turk for ten years before he was liberated by Ippolito II d’Este, recommended himself ardently (due to his language skills and experience with the Turks) as their custodian. He writes, “One kindly requests that Your Lordship may favor Master Giovanni Antonio de Grassi da Fano in the presence of the Most Illustrious Lord Cardinal D’Este so that he makes him the governor of his slaves that are in Tivoli. For he [master Giovanni] has good knowledge of the Turkish and Slavonic languages because he was a slave of the Grand Turk for ten years, and he was liberated last year by the aforesaid Lord Cardinal. And he is an honorable man and will accomplish this task honorably and devotedly and with great diligence.”

It remains speculation as to whether the fifty Turkish slaves fleeing from their custodians (among whom may have been an Italian ex-slave of the Grand Turk) or those replacing them had any specific skills that could have aided in building or maintaining a villa garden. Even if this is unlikely, the example shows that a comparative investigation of the role of slaves in gardens might be a worthwhile undertaking.

**Conclusion: Mutual Influences on the Chosen “Path to Civilization”?**

The aspects presented above touch on a widely unexplored field of research. What can be learned from this brief overview about the “mutual influences” on the Christian Italian and Islamic Ottoman traditions of garden design? In both Rome and Istanbul, prestigious palace and villa gardens constituted a stage for outdoing each other in the competition for political and cultural superiority. Both rivals tried to underpin their status as a universal power by integrating “civilizing elements” that drew on a common ancient heritage and thus contributed to shaping their distinctive identity. Both used a sign language based on absorbing
ancient models that produced comparable symbolic meanings and formal or functional solutions (processional order, victory memorials) in gardens. Both had to face similar challenges in the urban development sector, which triggered the study and further development of ancient practical knowledge and had a great impact on garden culture. Such similarities did not go unnoticed. The enemies were well aware of each other, even if written evidence of concrete influence is difficult to find (in particular because the information flow carried by ambassadors, travelling artists and scholars, or freed slaves was mostly verbal).

In the big picture, however, various types of influences become palpable: eclectic, dismissive, and transforming ones. Mehmed the Conqueror, who had shown his descendants of the House of Osman how to walk in the footsteps of the most illustrious examples of antiquity in order to excel in magnificence, used a syncretic approach. He consciously chose eclectic elements from various (ancient) cultures to invent his own “tradition” that turned a “barbarian” nomadic tribal culture into a “civilized” world power. Suleiman the Magnificent, who had opened up toward the West under his grand vizier Ibrahim Pasha, changed his strategy during his later reign, pointing out the differences of his leading Islamic culture vis-à-vis its Christian opponents. The Christian Italian attitude under the popes of this period is marked by a heightened awareness of being the legitimate heirs of ancient Roman civitas and humanitas. The disproportion of territorial and spiritual power on a global scale resulted in representative needs that put the main accent on its achievements in the arts and sciences, claiming hegemony over the humanist idea of cultural advancement (expressed in gardens by staging a narrative path from nature to civilization). An increase in arrogance may be perceived in the attitudes of both cultures toward one another in the second half of the sixteenth century—for instance in the growing seclusion of the almighty sultans in their private paradises of Istanbul versus the public and competitive demonstration of the advanced status of arts and sciences in Rome’s gardens. Here I have been able to do no more than outline a comprehensive framework for future comparative studies. All five “civilizing elements” of the garden that I have discussed—planting, architecture, spolia, water, and manpower—will require substantial further investigation.

NOTES


5. There is still a great deal of research to be done on viewing habits in the field of comparative studies. For a general introduction to the problem, see Hans Belting, Florence and Baghdad: Renaissance Art and Arab Science, trans. Deborah Lucas Schneider (Cambridge, Mass.: Harvard University Press, 2011). Gülru Necipoğlu, The Age of Sinan: Architectural Culture in the Ottoman Empire (London: Reaktion Books, 2005), 111, qualifies the Ottoman "subjective visual order that collapses multiple perspectives into a single composition" in terms of a "cubist" approach. Unfortunately, the archives of architectural drawings from Sinan's time, which could give a supplementary impression different from the topographic miniature paintings, have been lost; see Gülru Necipoğlu, “Plans and Models in 15th- and 16th-Century Ottoman Architectural Practice,” Journal of the Society of Architectural Historians 45, no. 3 (1986): 224–43.


8. Constantinople had been called a "Second Rome" or "New Rome" since the time of Constantine the Great. Under Byzantine rule it was referred to as the "Eastern Rome." Naming a capital and empire connected to the Western or Eastern Rome a "New Rome" stresses the empire's intention to succeed the legacy of ancient Rome with its claim to universal dominion. In this regard the rebuilding of both Rome and Constantinople/Istanbul in the fifteenth and sixteenth centuries is alluded to here as the creation of a "New Christian Rome" or "New Islamic Rome," respectively.


10. Necipoğlu, Age of Sinan, 83.


12. Turkish embassies were established in Europe only in the eighteenth century. Therefore, the general opinion tends to discern Western influences on Ottoman palace garden design in this period specifically. But information on Western gardens was most probably extant in sixteenth-century Istanbul, from spies and through the exchange of garden views and presents, like the water organ sent by Queen Elizabeth I and installed in the Topkapı palace gardens by its builder, Thomas Dallam. Dallam wrote an account of his journey: The Diary of Master Thomas Dallam, 1599–1600, in Early Voyages and Travels in the Levant, ed. J. Theodore Bent (London: Hakluyt Society, 1893). See Gülru Necipoğlu, Architecture, Ceremonial, and Power: The Topkapı Palace in the Fifteenth and Sixteenth Centuries (New York: Architectural History Foundation; Cambridge, Mass.: MIT Press, 1991), 155–56. Artists and architects were also sent to Europe: see Necipoğlu, Age of Sinan, 101; for a list of architects who held the rank of imperial master (çavuş), see appendix 4.4–4.5.


14. Arun Bala, for example, offers a useful multicultural perspective on the history of modern science in The Dialogue of Civilizations in the Birth of Modern Culture (New York: Palgrave Macmillan, 2006).


is “humanitatem” in the Latin original and is rendered in an English seventeenth-century translation as “Culture and Humanity.” Compare Augerii Ghislenii Busbequii legationis Turcicae epistolae quatuor . . . (Hanover, 1605), 51, with The four epistles of A. G. Busbequius . . . (London, 1694), 65.

17. The 1550s, the period when Sinan consolidated the corps of royal architects, roughly marked a change in artistic climate, when the former eclecticism characterized by invitations to foreign artists was replaced by the emergence of a synthetic Ottoman style. Nevertheless, it would be rash to conclude that there was less preoccupation with foreign concepts and strategies. Necipoğlu, Age of Sinan, 101.


23. This epithet for Mehmed II was used in the foundation inscription at the entrance gate to the Topkapı Palace. Necipoğlu, Architecture, Ceremonial, and Power, 34.


27. The text of Xenophon is preserved in a Latin translation by Cicero. Xenophon, The Economist, in The Works of Xenophon, vol. 3, pt. 1, trans. H. G. Dakyns (London: Macmillan, 1897), available at http://www.gutenberg.org/files/1173/1173-h/1173-h.htm. The text first praises King Cyrus the Great for his interest in military as well as agricultural matters. Wherever he went he made “it his first care that there shall be orchards and gardens, parks and ‘paradises,’ as they are called, full of all fair and noble products which the earth brings forth; and within these chiefly he spends his days, when the season of the year permits” (4.10). Then his son Cyrus the Younger is described as the perfect role model of a ruler; the tale of his garden in Sardis is especially elaborated: ‘Lysander was astonished at the beauty of the trees within, all planted at equal intervals, the long straight rows of waving branches, the perfect regularity, the rectangular symmetry of the whole, and the many sweet scents which hung about them as they paced the park. In admiration he exclaimed to Cyrus: ‘All this beauty is marvellous enough, but what astonishes me still more is the talent of the artifciar who mapped out and arranged for you the several parts of this fair scene.’ Cyrus was pleased by the remark, and said: ‘Know then, Lysander, it is I who measured and arranged it all. Some of the trees,’ he added, ‘I planted with my own hands’” (4.16–19).

28. See Necipoğlu, Architecture, Ceremonial, and Power, 12 and 1137–40. Mehmed II fashioned himself as an ideal humanist sovereign. At his cosmopolitan court artists and scholars from both East and West found patronage. See also Nesilhan Asatay-Effenberger and Ulrich Rehm, eds., Mehmet II: Eroberer Konstantinopels, Patron der Künste (Cologne: Böhlau Verlag, 2009).


31. The comparison of a villa to the Garden of the Hesperides has an ancient prototype as well. It refers to Martial’s description of Julius Martialis’s villa (Epigrammata 4.64.1–10). Brummer, Statue Court, 234. The story of Cyrus’s tree planting became very popular in the Italian books on villa life and culture that proliferated in the second half of the sixteenth century.

32. The Venetian vice-bailo Pietro Zen stated in 1524 that the sultan visited the gardens around Istanbul almost every day, and even as late as 1553 the Venetian bailo Bernardo Navagero mentioned that he went hunting nearly daily. Necipoğlu, “Suburban Landscape,” 33.

33. Çelebi’s description of Kuleli Bahçesi is quoted in English in the Ottoman Gardens Catalogue: see http://www.doaks.org/resources/middle-east-garden-traditions/catalogue/C129; original text transcribed in Çelebi, Seyahatnâmesi, vol. 1, 140b. The young Philippe du Fresne-Canaye described Kuleli Bahçesi in 1573 as an exceptionally civilized example of Ottoman garden art. He did not note the importance of a single cypress tree
there, but was impressed by the height of the tower—though he counted four floors fewer than Çelebi. See the English translation in Atasoy, A Garden for the Sultan, 316: "When we look at the architecture of the tower, one can see that if one wishes to spend money on palaces, Turks are no less skillful than Christians at this. This was the tallest building I saw in Turkey; it had five storeys and was worth more admiration in this barbarous country as Turks are used to sitting on the floor and do not like to climb stairs. As they will have to abandon everything when they die, they say their houses should not be so comfortable and beautiful that they would grieve on leaving them.”

34. Cypress trees and columns are described in literature as standing watch; see, for example, Sinan, Autobiographies, 117: “Think not that the marbles erected in its courtyard are columns! They are numberless jasmine-faced cypresses standing watch.”

35. See William L. Hanaway Jr., “Paradise on Earth: The Terrestrial Garden in Persian Literature,” in The Islamic Garden, Dumbarton Oaks Colloquium on the History of Landscape Architecture 4, ed. Elisabeth B. MacDougall and Richard Ettinghausen (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1976). 47. Another typical ordering structure in Ottoman gardens was the pattern of four cypress trees planted around a pool or kiosk. This is suggested, for example, by the illustration of the garden models that were carried through the Hippodrome during the parade of the circumcision festivities of 1582, depicted in the Surname (Book of festivities).

Necipoğlu, “Suburban Landscape,” 70, fig. 19a–b. This must have reminded the Ottoman viewer of the paradisiacal feature of four cypresses standing around the ablution fountain in the forecourts of the Mehmed Fatih and other mosques. The atrium of Hagia Sophia was known to have had eight cypresses, two of which were still extant in Mehmed’s time. Necipoğlu, Age of Sinan, 84 and 161. From Sinan’s Record of Construction it can be deduced that, columns, and by analogy also cypresses, represent “the four friends,” that is, the four righteous caliphs, or the “House of Islam on four pillars,” respectively (Autobiographies, 123). On the cypress in Ottoman poetry and gardens, see also Walter G. Andrews, Gardens—Real and Imagined—in the Social Ecology of Early Modern Ottoman Culture, in Gardens and Imagination: Cultural History and Agency, ed. Michel Conan, Dumbarton Oaks Colloquium on the History of Landscape Architecture 30 (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2008), 100.

36. The golden/red apple (kızıl elma) was the central motif of the apocalyptic tradition in Ottoman time. It refers to the golden globe in the left hand of the equestrian statue of Justinian on top of the column in front of Hagia Sophia. It could be seen from very far away, from the sea one day before one arrived at Constantinople, and demonstrated the subjugation of the earth by the Christian emperor Justinian. Therefore, Mehmed II tore it down after the conquest of Constantinople. According to another tradition, Alexander had made an apple of the gold from his tribute-paying provinces. This golden apple is said to have been presented by Melchior, one of the Three Magi, to the newborn child Jesus, thus demonstrating the transfer of universal sovereignty into the hands of Christ and the Christian rulers succeeding him. In the Ottoman literature the conquest of the kızıl elma becomes synonymous with the submission of the Christian world and the expansion of Islam. See Stéphane Yérasimos, “De l’arbre à la pomme: La génalogie d’un thème apocalyptique,” in Les traditions apocalyptiques au tournant de la chute de Constantinople, ed. Benjamin Lellouch and Stéphane Yérasimos, Varia Turcica 33 (Paris: L’Harmonatt, 1999), 153–92.


38. This documents, for example, Johannes Cuspinianus, a humanist in the service of Ferdinand of Habsburg. In his Oratio protreptica of 1526 he cautions against the Ottoman Empire, which he calls the “insatiate dragon,” by recording the following story that makes an analogy between the eating of an apple and the conquest of Christian Europe: “Mohamed II, the Emir of the Turks, as they called his King, once gave his son sitting at the table a whole apple to swallow, but the boy looking at his father asked for a knife to cut it with. How shall I swallow it as a whole, oh my father, he asked.

You speak well, said the father, because the apple must be cut and the slices swallowed one after the other. I suggest that you swallow the Christians in a similar way, tear the countries and provinces gradually, one after the other and finally swallow them.” See Pál Fodor, “The View of the Turk in Hungary: The Apocalyptic Tradition and the Red Apple in Ottoman-Hungarian Context,” in Lellouch and Yérasimos, Les traditions apocalyptiques, 129, repr. in In Quest of the Golden Apple: Imperial Ideology, Politics, and Military Administration in the Ottoman Empire, Analecta Isiana 45 (Istanbul: Isis Press, 2000), 101.


41. “But the God-fearing shall be amidst gardens and fountains: ‘Enter you then, in peace and security!’ We shall strip away all rancor that is in their breasts; as brothers they shall be upon couches set face to face; no fatigue there shall smite them, neither shall they ever be driven forth from there” (Qur’an 35:45–48). See Necipoğlu, Architecture, Ceremonial, and Power, 36–37.

42. Necipoğlu, Architecture, Ceremonial, and Power.

43. “No one enters freely except the household staff of the royal palace. Others are not permitted to enter without permission from the sultan, except while the sultan sits just inside by the doors, so that the royal ministers and ambassadors, when they need to wish the sultan well, pay homage with a kiss on his hand. The sultan sits on a rather humble little couch for this, but it is spread magnificently inside a small marble structure, gleaming with gold and silver and precious stones. The structure is surrounded by a portico supported with spiraled columns of rare marble, their capitals and bases entirely gilded.” Pierre Gilles, Pierre Gilles’ Constantinople: A Modern English Translation, trans. Kimberly Bird (New York: Italica Press, 2008), 17–18.

44. This suggests, for example, Caterino Zeno’s description in 1550:

“One passes into a very beautiful loggia, the floor of which is of diverse fine stones of many colors, with a very fine vaulted ceiling of azure and ultramarine, full of stars of pure gold, in which is a very fine fountain resembling a holy-water basin; it has most beautiful windows with

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iron-gratings and beautiful glass panes which overlook the gardens; from this very beautiful and pleasant place one enters the audience hall and the presence of that Grand Signor.” Quoted in English in Necipoğlu, Architecture, Ceremonial, and Power, 102.

45. Gilles also describes this view with fascination; see Gilles, Constantinople, 18f: “Even though the views from all of Constantinople’s hills are very fine, none can compare with the view you get from the first hill where the sultan resides in extreme comfort. Whether he strolls in his gardens or rests at home, he has before him a complete panorama.”


47. Alternatively, it could be called a sequence from negotium to otium, as the secret garden or statue court, respectively, was opened to the interested public under Julius II and most of the subsequent popes.


51. A letter written by the Italian humanist Francesco Filelfo to the Greek scholar Antonio Amiruztes at Mehmed’s court, dated July 30, 1465, gives the information that Filarete was about to come to Istanbul that very summer. See Necipoğlu, Architecture, Ceremonial, and Power, 14–15; Necipoğlu, Age of Sinan, 86ff.; Marcell Restle, “Die osmanische Architektur unter Mehmet dem Eroberer und die Italienischen Renaissance,” in Italien und das Osmanische Reich, ed. Franziska Meier, Studia Turcica 2 (Herne: Gabriele Schäfer Verlag, 2010), 22, transcription of the letter, 16.


54. Giovanni Maria Angioletto, who served at Mehmed II’s court (1474–81) and later returned to Italy, described these pavilions: “And in this garden there are three pavilions about a stone’s throw distant from one another, and they are built in various modes. One is built in the Persian mode [alla Persiana], decorated in the mode of the country of Karaman, and is covered with wattle and daub; the second is built in the Turkish mode [alla Turchesca]; the third in the Greek mode [alla Greca] covered with lead.” English quote in Necipoğlu, Architecture, Ceremonial, and Power, 210; for their interpretation as “metaphors of universal empire,” see 210ff. It is also assumed that Mehmed II planned to build another pavilion in the Italian style to celebrate the conquest of Otranto in 1480. Only the Persian pavilion, called the Tiled Kiosk (Çinili Köşk), has survived.

55. The picture of the battle of Chaldiran is noted by Busbecq in 1555 (Turkish Letters, 26), and also by Reinhold Lubenau in 1587–88; see Necipoğlu, “Suburban Landscape,” 33.

56. The Venetian ambassador Andrea Navagero described the water stairs of the fourteenth-century Generalife in a letter to his humanist friend Giovanni Battista Ramusio in 1526 (published for the first time in 1556) as follows: “At the highest part of the site in a garden there is a lovely wide staircase. . . . The stair is made of masonry and every few steps has a landing with a hollow to hold water. The parapets on each side of the stair have hollowed stones on the top, like channels. The valves at the top of the stairs are arranged so that water can run either in the channels or in the landing hollows or both. The volume can be increased so that the water overflows and inundates the steps and drenches anyone there.” See Elisabeth B. MacDougall, ed., introduction to Fons Sapientiae: Renaissance Garden Fountains (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1978), 10; Golombek, “From Timur to Tivoli,” 244; Cammy Brothers, “The Renaissance Reception of the Alhambra: The Letters of Andrea Navagero and the Palace of Charles V,” Muqarnas 11 (1994): 79–102.


58. According to Philippe du Fresne-Canaye, the garden’s pavilion was “constructed over the sea on top of tall columns, completely covered inside with very precious ceramic tiles and outside with inestimable marbles.” A later source, Antoine Galland in 1672–73, reveals that these marbles were ancient spolia, showing Bacchic imagery, and that the poetic inscriptions in Turkish and Persian alluded to the pleasures of wine. Necipoğlu, “Suburban Landscape,” 37. Necipoğlu points out that the pavilion also incorporated spoils of war from Tabriz and Sultanate, and that it was presented to Persian diplomats as a symbol of victory in 1523.

59. See note 16 above.

60. His De topographia Constantinopolos et de illius antiquitatis libri IV was published in Lyon in 1561. See Gilles, Constantinople.


64. See the quotation from Gilles in the text above at note 61.

65. See note 38 above.

66. The chapter is in the version Record of Construction (Tezkiretül’bünyan). Sinan, Autobiographies, 119.

67. Ibid., 121. Selsebil is the name of a fountain in paradise (Qur’an 76:18); Kevser is the name of a river in paradise or a pond shown to the Prophet at the time of his Night Journey to the Throne of God (Qur’an 10:81).

68. Gilles, Constantinople, 215.
71. It is reported that Sinan studied the ruins of the ancient bridge at Büyükçekmece before rebuilding it in a better way. Sinan, Autobiographies, 128.
72. Loos’s depiction of the kiosk in the Sultaniye Garden of 1710 (fig. 3.7), for instance, shows two foreigners arriving by boat and bribing a gardener in order to enter the site.
73. Nicolas Audebert, for example, a French visitor to Rome in 1576–77, was most probably shown through the gardens of the Villa d’Este by an engineer. He got detailed knowledge on the functioning of water tricks and was told anecdotes about the creation of the fountains. Ronald W. Lightbown, “Nicolas Audebert and the Villa d’Este,” Journal of the Warburg and Courtauld Institutes 27 (1964): 164–90.
77. The quote from Zappi is transcribed in Francesco Saverio Seni, La Villa d’Este in Tivoli: Memorie storiche e tratte da documenti inediti (Rome: Tata Giovanni, 1902), 65.
78. Ibid. (my translation).
The Art of Garden Design in France

Ottoman Influences at the Time of the “Scandalous Alliance”? 

The Ottoman Empire and Europe maintained a long relationship characterized by frequent cultural exchanges. France was particularly involved in these relationships because of the Ottoman embassies to France in 1533 and 1534. From the arrival of the ambassador Jean de La Forest (d. 1537) in 1535, the largest European embassy in Istanbul was the French.1 These exchanges, clearly associated with geopolitical stakes, were evidence of a commercial economy. The consumption of artistic goods—silks, carpets, faïences, and so on—contributed to the development of an international material and aristocratic culture common to both Western and Eastern princes.2 This commercial network included the sale of plants. A number of studies have explored this phenomenon, which already existed in Turkey and developed in Europe during the sixteenth century.3

At that time, the attraction to botanical curiosities, which manifested itself in botanical gardens, interested a growing number of European scholars and amateurs. The height of the compulsive collection of exotic bulbs was demonstrated in Holland around 1630.4 Tulipomania—the period when the tulip, introduced from Turkey, reached extraordinarily high prices—has been studied, but most developments in the horticulture of exotic plants in sixteenth-century France remain relatively unknown. The key studies relating to the art of the garden during the French Renaissance period, conducted by Kenneth Woodbridge and Danièle Duport, do not examine the subject. Similarly, the work of Ina Baghdiantz McCabe has shown the importance of Ottoman Orientalism in France during this period, but does not mention its influence on the layout development of Occidental gardens.5 If we consider the possibility of exchange of architectural concepts during the early modern period, evidence of Oriental contributions to the development of architectural forms in those European territories that fell under Anatolian influence has been provided by Maurice Cerasi, Deborah
Howard, and Gülru Necipoğlu. However, such transfers in relation to garden design are difficult, if not almost impossible, to observe. Indeed, these early gardens have undergone successive abandonments and changes in fashion, and most of their physical remains are in a state of ruin. Despite this, Cerasi has shown that between 1620 and 1730 the art of gardens à la française influenced Ottoman garden culture. But what of the previous century?

The reign of Francis I of France (1515–47) was characterized by the spread of humanism, geographical discoveries, the development of the mechanical and liberal arts, and the elaboration of new codes of sociability. At this time, fortified castles were replaced by “pleasure palaces” with elaborate decoration and gardens. In the Loire Valley and around Paris a wave of building was carried out, and many châteaux appeared in the Italian style with pleasure gardens, such as Gaillon (1506–9), Bury (1515), Blois (1515–24), Fontainebleau (1528–47), and Folembray (1540–52), which were characterized by ornate, regular, articulate, enlarged, and theatrical spaces. In 1495, following the First Italian War, French gardeners borrowed know-how from Italian gardeners who entered the service of Charles VIII of France (1470–98) and moved from Naples to France to work in the royal gardens. These talented and respected Neapolitans, perhaps garden designers and hydraulic engineers, such as Pacello da Mercogliano (c. 1455–1534), continued to be employed by Louis XII (1462–1515) and Francis I. But between 1520 and 1530, in the context of a controversial and scandalous alliance between France and Turkey, they were partially replaced by Ottoman specialists, also briefly mentioned by Léon Palustre, Pierre Lesueur, and Marguerite Charageat. In 1547, a second French embassy was sent by the king to the Ottoman Empire. Henry II (1519–59) continued the policy of alliance of his father, Francis I. This expedition included numerous scientists, such as the naturalists Pierre Belon (1517–1564) and Pierre Gilles d’Albi (1490–1555) and the topographer Nicolas de Nicolay (1517–1583), and their writings describe the gardens they saw. What views did these highly educated French humanists hold of the “program” (in the sense of architectural programming) of the Ottoman gardens, and what effect, if any, did this program have on the French Renaissance garden?

Exchanges on the art of gardens between France and the Ottoman Empire in the decades following the “scandalous alliance” of Francis I and Suleiman the Magnificent (1494–1566) were possible because the cultural and political context was favorable. Such exchanges on the French side could involve not only people and plants, but also horticultural expertise and taste in architectural forms. In an attempt to confirm these historical facts, we will examine the records of the royal buildings during the reign of Francis I, published in the nineteenth century by Leon de Laborde (1807–1869) and the Académie des sciences morales et politiques. These books, compiling accounts of the works commissioned by the monarch, are the main archival material about finance and art during the French Renaissance and are frequently revisited and reinterpreted by scholars. We shall also consider the tales of foreign travelers in French châteaux mentioned by Marc Hamilton Smith, and French travelers in the East as discussed in Alexandra Merle’s research.

Other writings, such as treatises on gardening, as well as those whose subject is less immediately related to this topic, such as botanical works, dictionaries, chivalric romances, and courtly love stories, are also part of our corpus. We must compare the princely gardens depicted in the French and Ottoman iconographies with these texts. To this end, we will focus, on the one hand, on the plans of Les plus excellents bastiments de France (The finest buildings
in France, 1576–79), an anthology of architecture engraved by Jacques Androuet du Cerceau (c. 1515–1585), and, on the other, on the illuminations of the Hünernâme manuscript kept in the Topkapı Palace in Istanbul. Books of embroidery patterns, which also reflect the French enthusiasm for Oriental artistic productions, are appropriate in the context of this study. Such linking and cross-checking of textual or iconographic records, which have been inadequately considered up to now, may allow us to highlight aesthetic expression resulting from exoticism in the art of the garden. An in-depth interpretation of these quantifiable sources in relation to the cultural context of French-Ottoman relations in the first half of the sixteenth century must be undertaken. The concept of habitus (way of being, disposition, frame of mind) is a theoretical tool that can provide us with a key to understanding the relationship between individual behaviors or beliefs and the cultural environment of the art of the garden in France during the Franco-Ottoman alliance. This concept, already present in medieval scholasticism, has been defined by Erwin Panofsky as habits of thought and learning in the context of architecture, systematized by Pierre Bourdieu as the set of “generative schemes of codified practices,” and put in the context of theatrical festivities and performances inspired by the East by Guy Le Thiec.

The Fascination with the Ottoman

The image of the Turk in the Renaissance and the Reformation characterized Muslims as the enemy. But on many occasions French people of this era reported impressive and positive aspects of Ottoman culture based on luxury and strength. Before the mid-sixteenth century, this attraction was amplified as a result of French and Turkish positions in geopolitics. The extent of the Ottoman Empire’s power was immense; it extended into three continents, from North Africa to the limits of Persia and to the plains of Hungary. The empire was thus the first power in the world. Therefore, in the Christian world, Muslims were usually defined as Turks. After his defeat by the Holy Roman emperor Charles V at the battle of Pavia in Italy in 1525 and his capture and imprisonment in Madrid, Francis I established a diplomatic, economic, and military alliance with Suleiman the Magnificent against the House of Habsburg. Many evocations of and references to the seductive aspects of Turkish culture, directly or indirectly related to the art of the garden, can be found in France in those days, including in theater, visual arts, travel accounts, and chivalric literature. This phenomenon of creative imitation has been described in the court of René of Anjou (1409–1480), also known as René I of Naples. It can be compared to medieval traditions of entertainment for the nobility, both French and Italian (including parades, ballets, masquerades, and so on), at which the customs of the fascinating Turkish or Moorish “enemy” were displayed. Being dressed in Ottoman attire in a carnivalesque way suggested the dangerousness of the “infidel” while highlighting his political and warlike powers at the same time. In this way, in 1541, at the wedding of Jeanne d’Albret in Châtellerault, Francis I and other princes were dressed in Turkish masks and costumes. The same year, the king was dressed à la turquesque (in the Turkish manner) for the festivities marking the visit of a French diplomat of Spanish origin, Antonio Rincon (d. 1541), the French ambassador to Turkey. The expression s’accoustrer à la turque (to dress in the Turkish fashion) first emerged in the Cymbalum mundi (1537), by the French poet and philosopher Bonaventure Des Périers (c. 1510–1543/44). This desire to imitate the
appearance of the Turk was not only a temporary and meaningless fashion, as the influential French Protestant theologian John Calvin (1509–1564) charged: “Today the French take very great pleasure in dressing in the Turkish manner, especially as they have many dealings with the Turk.” This social practice reveals the almost incantatory appropriation logic of the Oriental habitus.

The publication in 1530 by the Florentine Francesco Pellegrino (d. 1552) of La fleur de la science de pour-traiture (The finest science of design), which contains decorative patterns in the “Moresque” style, shows that this “mimetic desire” was not confined to the fields of valuable textiles; it could also be seen in all artworks involving the use of ornaments. This is reflected in records of the royal buildings or in courtly literature. For example, in the Songe de Poliphile (1546) and in several episodes of Amadis de Gaule, published during the same period, we read that objects of different kinds were covered with “arabesque” or “Moresque” ornamentation. This assessment, linked to the abundance of pattern books of Moresques (arabesques), comparable to Pellegrino’s series published in the sixteenth century, reveals that during this period accostrement (“A dressing, attiring, apprelling, decking, trimming; also, a garment, raiment, habiliment, suit of apparell, suit of cloathes”) was the object of a highly appreciated Oriental manner.

The anthropological importance of this material culture has been amply demonstrated by Patricia Fumerton and Lisa Jardine. Ann Rosalind Jones and Peter Stallybrass have shown that the making and exchange of ornate and luxury fabrics were fundamental to the creation of Renaissance culture, because the precious textiles operate as forms of memory, constructing mental images transmitted one to another. We believe that this mnemonic “aesthetic of clothing” was diffused in the aristocratic environment until the garden, as the commonly used expression “dresser des quarreaux du jardin” (to dress a parterre) seems to indicate. We will return to this subject with more details below.

Chivalric romances read in France during the age of the first modernity also expressed the desire to introduce exotic and marvelous elements from Turkey in aristocratic gardens. René of Anjou, well known to be a garden lover, wrote the Livre du Cuer d’Amour espris (The book of the love-struck heart, 1457), which has a description of a “Parc faë,” a garden full of trees covered with exotic fruits. Tirant lo Blanch (1490), written by the Valencian knight Joanot Martorell (?–1495), translated into Italian in 1538 and well known in France at this time, is another chivalric romance that reinforced the obsession with marvel-filled adventures that influenced French kings. A fascinating section of this romance, occurring around Constantinople, deals with the adventures of a black Moorish slave gardener named Lauseta (“lark” in Catalan). It is possible that the novel accentuated a vogue for Middle Eastern things.

Travel narratives in the Orient, which include descriptions of “forms and habits of foreigners,” offered much to satisfy this specific desire for strange and wonderful otherness. Thus, in his Orientales histoires (Middle East stories, 1560), Guillaume Postel (1510–1581), who was the official interpreter of the French ambassador to the Turkish sultan Suleiman the Magnificent, Jean de La Forest, compares the hierarchy of the sultan’s gardeners to a powerful and extraordinary army comprising several hundred gardeners. Indeed, it was a corps of bodyguards who, aside from cultivating the imperial gardens, doubled as security agents. Nicolas de Nicolay also refers to that outstanding Turkish organization in his Navigations peregrinations et voyages faict en la Turquie (Navigations, peregrinations, and travels in Turkey, 1576).
Garden Design in France

Two Ottoman Gardeners Serving the French King in Blois

Jérôme de Naples (Jerome of Naples) was a gardener at Blois from 1527 to 1531, after which, for unknown reasons, Pacello da Mercogliano, the famous Neapolitan abbot-gardener who came to France in 1495 in the suite of King Charles VIII, is known to have succeeded him. Pacello had first been posted in the royal gardens of Amboise. While his exact role in the architecture of garden history is still unknown, these Italians are respected for having contributed to bringing Italian elements into French gardens. Pacello died in 1534, and the direction of the low garden was then given by letters patent to Guillaume le More, an Ottoman Moor with a "Frenchified" first name, who obtained a letter of naturalization. Responsibility for the high gardens fell to Denis da Mercogliano, who was likely Pacello’s nephew and assistant:

Letter in which the king gives the responsibility of the garden of Blois to Guillemin le More, replacing the deceased Paolo de Mercoliano.
Saint-Germain-en-Laye, July 14, 1534.

According to Marc Hamilton Smith, the lower part of the gardens of Blois, which had been laid out close to the castle in 1518, was without doubt the most sumptuous since he became king (fig. 4.1). For this reason, the French king honored his Ottoman servitor by giving him these wages and responsibilities.

During this era, diplomatic events clearly reveal a good French-Turkish relationship: in July 1533, Khair-uddin (1478–1546), the admiral of the sultan, also named Barbarossa, sent a messenger to the town of Le Puy-en-Velay in south-central France with a lion and Christian prisoners whom he had freed. In 1534, to thank Barbarossa for his generosity, Antonio Rincon was sent to Algiers. Gift exchanges and imitation here certainly had social and political meanings. Thus, Guillaume le More arrived at the French court with the embassy personnel as a diplomatic servant or slave “gift” in 1533. We know that converted slaves were drafted into imperial service to be officials, gardeners, armorers, and other positions, like the famous Janissaries, who took part in the Ottoman embassies in France.

In February 1536, Jean de La Forest negotiated the “capitulations,” on the model of previous Ottoman commercial treaties with Venice and Genoa. In September 1536, the French admiral Bernard d’Ornezan (c. 1505–c. 1556) joined his galleys with a smaller Ottoman fleet belonging to Barbarossa in Algiers to attack the island of Ibiza. A Franco-Turkish fleet was stationed in Marseilles by the end of the year. But to identify the importance of this move and its place in garden history, it is necessary to answer several questions. Did the appointment of the gardener Guillaume le More instead of a Neapolitan gardener indicate the high regard that the French king had for Ottoman power? What skills in the art of the garden did he bring to France from the Ottoman Empire?

In February 1537, a letter of naturalization accorded French nationality to Guillaume le More, here named Guillemin Le Maure, and to his brother, whose name is not given:

Letters of naturalisation granted to Guillemin Le Maure and his brother, coming from Turkey to France to be at the service of P. de Mercoliano in charge of the gardens at the palace of Blois.

Moulins, February 1537.

These “letters of naturalization” were not insignificant. This was a royal prerogative that protected against the rights of escheatage, or aubaine, by which the king, or his officers, could claim the property of foreigners. As Christine Isom-Verhaaren shows, Francis granted this right to numerous talented foreigners, mainly European, regardless of their origins: “Service to the state by foreigners was repaid by the privileges of citizenship, which was obtained through naturalization.” But at that time in France naturalization of someone from the Ottoman Empire was an “exceptional circumstance.” This situation, combined with replacement of the Italian gardener, may have been a result of the political developments of the Ottoman and French alliance.

In the February 1537 letter, we also learn that the Ottoman gardeners were first placed under Pacello’s orders before his death in 1534. This should be considered another consequence of the French-Ottoman relationship, because it directly followed Jean de La Forest’s trip to Turkey as ambassador. Furthermore, also in 1537, the artists Luca Penni (c. 1500/4–1556) and Antonio Fantuzzi (1510–1550) were mentioned for the first time in Fontainebleau; the Italians were still as popular as ever, even if the king gave projects to others as well.

Quentin le More Sent to Fontainebleau

A 1541 royal order provides some information related to the duties of Quentin l’Affricain (the African), named le More, as gardener of the châteaux de Fontainebleau—presumably he was the brother of the previous gardener, Guillaume le More:

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Francis, by the grace of God king of France—we want and we demand—that you pay cash to our dear and beloved Quentin l’Affricain, named le More, whom we have hired as a gardener, the sum of 240 livres every year, starting the first of January and to continue as long as necessary—for his wages as gardener, and to cultivate and to tend our garden and its paths located in the enclosure of our pond of Fontainebleau, that he has been granted; however, there he can take neither vegetables nor fruits, and earn neither income nor salary; he can harvest for his needs, but he cannot sell or give. For these are the obligations of the gardener Quentin l’Affricain, done at Fontainebleau on 5 January 1541.57

In this text, dated to the year of two significant turqueries previously mentioned, the king used an affectionate tone to evoke the treatment of the gardener of the palace of Fontainebleau he wished to convert in a “New Rome.” The appellative “l’Affricain” suggests that he was North African rather than Anatolian, like Léon l’Africain and other historical characters having this surname. Therefore, Guillaume and Quentin were probably not “Turkish nationals,” as assumed by Léon Palustre, Pierre Lesueur, and Marguerite Charageat. Guillaume’s name disappears from subsequent records, which suggests that Quentin replaced him (most likely because of Guillaume’s death).

The mention of his remuneration allows us to compare his resources to those of other actors in the project at Fontainebleau (fig. 4.2). Quentin’s salary, at a little over twenty livres per month, corresponds to that of Pellegrino, the talented ornament publisher previously quoted. The Le Mores’ place in the hierarchy of the artisan of the Fontainebleau project is not an insignificant one, but they bear no comparison with Francesco Primaticcio (1504–1570),58 who received an annual salary of 1,200 livres. The extract specifies one of the tasks of the people responsible for the royal gardens: maintaining the garden. It may seem surprising that this description of their role in the vast artistic project of Fontainebleau is not more dazzling. But, in a general way, these accounts are neither explicative nor detailed. We note the same lack of precision in letters patent concerning Italian gardeners.

In another official document, dated 1542, which uses exactly the same language as the extract above, we read that Pierre Lebryes, a gardener of French or Flemish origin, also earned the sum of 240 livres every year “to cultivate and to tend our garden and its paths located in the enclosure of our pond of Fontainebleau.”59 This document reveals that Quentin moved away from Fontainebleau.

In 1543, a royal order indicated that the payment of six hundred livres was to be given to gardeners of the château de Blois, the Oriental Quentin le More and the Neapolitan Denis Mercogliano: “Request to François Cordon Receiver of Blois that he pay gardeners of the château de Blois, Quentin le More and Denis de Mercoliano, 600 livres for their one-year wages. Fontainebleau, 8th January 1543.”60 Because the currency remained stable,61 this sum divided equally between the Ottoman and Italian gardeners is equivalent to the wages of Pacello da Mercogliano in 1531 and Bastien Tarquin, gardener of Catherine de Medici in 1571.62 It seems that the social status of Quentin had improved. This event of “small history” can be related to the beginning of the new Italian War in 1542. In 1543, the French army, led by François de Bourbon (1519–1546), and the Ottoman army, led by Barbarossa, joined to bombard the city of Nice. After this, Ottomans were allowed to winter at Toulon in 1543–44.63

The career trajectories of the two Ottoman gardeners were eerily similar to those of the famous Italian gardeners. We know little about the skills of these Italians, and
we know only that Guillaume and Quentin le More were employed “to cultivate and to tend” royal gardens. Did they manage hydraulic infrastructures, like converted Spanish gardeners in the Alhambra, or look after rare botanical specimens from the Levant? We know that they were probably of North African origin and the dates and the level of their appointments, and we can infer the places the held in the hierarchy of the king’s servants. We can also assume that their arrival in France and their career development were determined by the “scandalous alliance,” but we do not know how they earned the king’s trust so that they were able to succeed the dynasty of Neapolitan gardeners.

Guillaume Pellicier (1498–1568) was a well-known advocate of exporting plants. First sent to Rome as Cardinal du Bellay’s secretary, he became ambassador to Venice in 1539. There he had an acclimatization garden, in which, according to his letters to the writer and physician François Rabelais (1494–1553) dated July 1540, he cultivated *Colocasia*, native to India, and Celtic nard and anthora, which are alpine plants. These specimens, which were not native to the Levant, could nevertheless have come from the Ottoman Empire’s gardens, which at this time were by far the principal sources of exports of plants from Asia or

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Africa to Europe.67 These gardens, with their exotic species, developed thanks to exchanges between Muslim gardeners along the Silk Road. Some specimens may also have undergone horticultural improvements, either by accident or hybridization, which the growers would have welcomed. Some of these plants certainly arrived in Fontainebleau when Quentin le More presided, as we can read in a letter of Pellicier from Venice dated August 1540: “Here there is a favorable location for a garden, to fill it with all the scarce goods, to make it the nursery of your beautiful and incomparable Fontainebleau.”68

During this period, De re hortensi libellus (Book of the garden, 1536), by the physician and humanist Charles Estienne (1504–1564), was published. It contains a description of “carnations from India or Turkey,”69 but these exotic wonders, which, according to the famous French botanist Jacques Daléchamps (1513–1588), “seeded themselves in Barbary,”70 were in reality native to the Antilles. In the same way, corn (Zea mays L.), a Mesoamerican plant, was called “wheat from Turkey.”71 Such significant errors reveal that the geography of the Oriental, Asiatic, and American territories became mixed up in the minds of most people at the time, for whom India was in both Asia and America. It should be observed that during this period typical botanical gardens (gardens of simples), where utilitarian plants with marvelous properties were cultivated, were often integrated into the layout of pleasure gardens. “Pompons turquins,” some kind of cucurbit vegetables of Turkish origin, imported from Italy or farther away, are one example of the natural and exotic curiosities that could certainly be found in Levantine gardens.72 Therefore, this rare plant shared certain common features with the naturalia and exotica that were displayed in cabinets of curiosities. Following his trek, which began in the Orient in 1546 at the time of the second French embassy, the naturalist Pierre Belon introduced the lilac (Syringa vulgaris L.) to France;73 its Arabic name was lilak.74 At this point, the trail of Francis I’s Ottoman gardeners that we have observed ends.75 It is also well known that at the end of the Middle Ages the carnation (Dianthus caryophyllus L.)76 arrived from the Orient, as did the blackberry (Morus nigra L.), the hollyhock (Alcea rosea L.), the jasmine (Jasminum officinalis L.), the Maltese cross (Lychnis chalcedonica L.), the peony (Paeonia officinalis L.), and the opium poppy (Papaver somniferum L.). This first generation of importation seems to have been followed by the horse chestnut (Aesculus hippocastanum L.), the cloth-of-gold crocus (Crocus angustifolius Weston), the Crimean snowdrop (Galanthus plicatus M. Bieb.), the Byzantine gladiolus (Gladiolus byzantinus L.), the daylily (Hemerocallis sp.), the red primrose (Primula acaulis “Rubra” or Primula vulgaris subsp. Sibthorpii), and the sweet sultan (Amberboa moschata L.).77

Importing fantastic plants from Turkey was a cultural phenomenon that reached its climax with the tulipomania financial crisis in the 1630s. But at the time we are looking at, tulipans (tulips) were not yet a craze in Europe. They were first collected in Turkey in 1526–27,78 and most specialists consider their introduction to northern Europe to have taken place in the second half of the sixteenth century.79 However, this is by no means certain, especially in Spain and France.80

Turkish Plants in the First French Botanical Gardens

At the time we are discussing, research was being done on exotic plants with amazing and secret properties, as described in texts from antiquity. These wonders were first named, as in the Middle Age, simples in French or semplici in Italian, meaning herbs endowed with medicinal qualities and, by extension, rare and marvelous plants. According
to historians, the intensification and rationalization of the cultivation of simples from all quarters led to the creation of the first academic botanical gardens in Europe, inspired by the Orto de’i Semplici (Garden of Medicinal Herbs) laid out in 1545 in Padua (fig. 4.3).

Neither Fontainebleau’s gardens nor those at Blois, in the years 1537–41, were university institutions. But even in Padua, where the private botanical garden of Gaspar Gabrieli already existed in 1536, the cultivation of simples was not limited to university gardens. In the early modern world, amazing natural substances from the Great Muslim Empire represented a power desired by princes. Hence there was nothing strange about growing them in gardens owned by the king of France and the French aristocracy, as in the garden of René du Bellay (1500–1546) in Touvoie and Jean du Bellay (1492–1560) in Saint-Maur-des-Fossés, cited by the naturalist and explorer of the Orient Pierre Belon. But the exact composition and the evolution of the range of plants cultivated in these French aristocratic botanical gardens are little known.

In 1538, when the Ottoman gardeners were in charge of the gardens of Blois, Pierre Belon, who had worked first as an apothecary, was in charge of the garden of Touvoie in west-central France belonging to René du Bellay, the bishop of Le Mans. This garden gloried in possessing the first plane trees in France, a Middle Eastern plant already cultivated in Italy and brought to France. This garden, one of the first French botanical gardens, seems to have been an arboretum (fig. 4.4). As shown by Danièle Duport, Belon clearly defined his project of plant collection in Les Remonstrances . . . (The discourses, 1558). He recommended importing non-native or rare seeds that are not difficult to acclimatize. These plants must be sown in a kind of nursery, where they can be cultivated without being transplanted. He hoped to find plants mentioned by Theophrastus, but he aimed to introduce new woods and specimens with decorative foliage. Belon had not traveled to Turkey by that date, but he found a number of exotic specimens in Tuscany.

French cardinal, diplomat, and patron Jean du Bellay was a famous amateur gardener. His gardens at the château Saint-Maur-des-Fossés near Paris, which were engraved by Jacques Androuet du Cerceau in Les plus excellents bastiments de France (The finest buildings in France, 1576–79) (fig. 4.5), are mentioned in De herbarum notitia . . . (Knowledge about herbs, 1544), published by the German physician and botanist Remacle Fuchs (?–1587). An appendix to this work, called De simplicium medicam . . . (Medicinal herbs), is presented as a dialogue...
about recognizing plants from the works of Dioscorides and Galen. The participants in this discussion, which takes place in Cardinal du Bellay’s gardens, are Fuchs, Guillaume Marbesius, Jean Caballus, a certain Louis (a pharmacist), and a gardener, a skilled plant specialist, with the Latin name Johannes Turcicus; the name reveals his Ottoman origin (*turcicus* is Latin for “Turkish”). But this gardener, of whose existence we have no other evidence, may be a totally fictional character created by Fuchs to complete his book. Moreover, a gardener, no matter how skilled, was not a botanist (who was a herbalist), from whom he usually received instructions; these areas of expertise remained distinct throughout the sixteenth century.

Padua, Saint-Maur, and Turkish Gardens: A Comparison by Pierre Belon

During his travels in the Levant, Pierre Belon was interested in Oriental flora, but also in the gardens that he visited and told of in his stories. His expedition lasted from 1546 until the end of the reign of Francis I, three years after the last letter patent, which had stated the remuneration for the gardener le More in the gardens of Blois.90 It is therefore probable that the arrival of Oriental gardeners and Belon’s travels through the Ottoman Empire were two aspects of the same project of importing and acclimatizing plants. Belon’s impressions are collected in *Les observations de plusieurs singularitez et choses mémorables* (Observations of several singularities and memorable things), published in Paris in 1553. Even if its descriptions of gardens are not very detailed, this text contains valuable information, based on quite a revealing value judgment. Belon first explained that Turkish people had great interest in their gardens.91 However, in their art they anticipated neither the eminent Venetian humanist and scholar Daniele Barbaro’s (1514–1570) recently unveiled design for the University of Padua’s gardens, nor Cardinal Jean du Bellay’s gardens in Saint-Maur-des-Fossés (fig. 4.5): “Searching for their plants, we have often found ourselves looking at gardens: but we never saw a garden more magnificent than the one of Venice’s seigneur in Padua, designed by my lord Daniel Barbarus, Patriarch of Aquileia, a man of great ability and wisdom. The next best is in France, in St. Mor, near Paris.”92

The Ottoman and French people collected, at a huge cost, “foreign trees” (*arbres estrangers*) and beautiful flowers; the rare plants’ *florilegium* was a passion shared by these populations, so importing exotic plants to France must have preceded Belon’s journey. But this testimony does not describe the architectural landscape that formed the theater for these “collections” of plants in Turkey. On what criterion did Belon base his preference for two European gardens?

We know that Daniele Barbaro, identified by Belon as the main designer of the University of Padua’s botanical garden,93 was a personal acquaintance of Belon.94 The garden of “S. Mor” (today spelled Saint-Maur-des-Fossés) was the work of Cardinal du Bellay, previously mentioned. It is plausible that the French traveler wanted first to pay tribute to these people because they were his friends. But his opinion could also be based on botanical or architectural arguments. The first argument may seem surprising, because at this time European gardens were not, it seems, botanically richer than Turkish gardens, which included very expensive rare tulips and other exotic bulbs. However, contemporary descriptions of the Topkapı Palace show that for the French, the architecture of the sultan’s gardens was apparently not a symbol of modernity.95

In something the size of the Topkapı park, Belon may also have deplored the absence of a geometrically harmonized approach following the Vitruvian principles...
4.4 Château and garden of Touvoie or Touvois, Saint-Corneille. Cadastre napoléonien, cote PC\278\003, section 1–249, année 1836.

of architecture. In fact, the “organic” juxtaposition of the gardens did not lead to a huge squared weft as found in the modern gardens of the University of Padua in Italy and of the château de Saint-Maur in France. The spatial specificities of French and Turkish gardens were presumably the consequence of different architectural cultures. According to Cerasi, the project of Occidental geometrical spatial integration during the Renaissance, which corresponds to an ideology of harmony where the elements contribute to the coherence of a whole, is quite different from the Ottoman constructive program, in which importance is accorded to the fragmentary absorption of different architectural components keeping a certain autonomy in an organic structure.\textsuperscript{96} Ottoman art characterized itself by the syncretism of different sources: Persian, central-Asiatic, or from the far Orient.\textsuperscript{97} Byzantine and Western elements were also incorporated into this model.

The first academic European exotic plant gardens corresponded to a stage in the history of exchanges between Europe and the Sublime Porte. Nevertheless, according to Cerasi, who agrees with the theory initiated by Paul Coles in \textit{The Ottoman Impact on Europe},\textsuperscript{98} the balance of exchange between Europe and the Levant did not continue beyond the fifteenth century,\textsuperscript{99} even if after that point, as we have seen, important contributions continued to be made by Westerners. It was principally this progressive cultural change, accompanying the worldwide spread of the Italian Renaissance, that led Pierre Belon to judge that no Ottoman garden is “more magnificent” than those of Padua or of Saint-Maur. Cerasi’s assessment is valid for the architecture of a garden, as a monumental art of spatial layout and vegetal decoration. But it is clearly wrong for botanical or textile exchanges, as we tried to demonstrate in earlier sections, because these two exotic items should be taken as high-value goods.

Other travel accounts agreed with Pierre Belon’s personal view. Pierre Gilles d’Albi, called Petrus Gyllius in Latin, was a French natural scientist, topographer, and translator. In \textit{De Topographia Constantinopolis et de illius antiquitatibus libri IV} (The antiquities of Constantinople in four books, 1561), he detailed his observations of Constantinople carefully, including the Topkapı Palace. He describes the garden of the primary residence of the sultans, but it seems to be of little interest to him compared to the city’s other architectural wonders. Indeed, he calls imperial garden courtyards in Topkapı simply by the Latin term \textit{area} (surface). He does not accord importance to these spaces,\textsuperscript{100} even if he does notice the dimensions, the diversity of colonnades, and the presence of cypresses and plane trees. Other gardens in Istanbul as well are only lightly sketched.\textsuperscript{101} The notable importance he accords Byzantine antiquities may have left little space for attention to gardens. Gilles was obsessed with the Greco-Roman vestiges that were about to disappear. Sometimes he reverently bows to the beauty of Ottoman architecture, but more often he deeply regrets the poor quality of the buildings constructed in place of the earliest and most honored antique monuments.

Another description comes from \textit{Navigations, Peregrinations, et Voyages en la Turquie} (Navigations, peregrinations, and travels in Turkey, 1576), based on the French topographer Nicolas de Nicolay’s journey that began in 1551.\textsuperscript{102} The work went through many edits and was translated into several languages.

In the middle of a hill, can be seen a beautiful garden, which starts in the middle of the mount and goes down to the sea. Here are several small houses and
habitations, with a porch sustained by some columns like a friars’ cloister: around this one, there are about 200 rooms and the Lord occupies almost all of them. A little bit lower, there is another habitation, all made with light glass, joined and linked with sticks in thin tin in form of round cupola or hemisphere. And above, there is a beautiful fountain that flows down by the cupola and spills out in the garden. Baiazet often came here in Summer to refresh himself and had a rest listening to the mild murmur of water. But now, almost everything is in ruin, so the water takes its source in other parts. In this part, there is still the Seraglio of the sultana, wife of the Great Turk, with sumptuous baths. . . . This court has a beautiful fountain in the middle, surrounded by several beautiful cypresses. At the bottom of the garden at the end of the seraglio and beside the sea, there is another door next to which there is a small pavilion, from where the Lord went when he wanted to have a walk in the garden, which he has made in the Natile (Anatolia) at the place named Scutary by the Turks, in ancient times Calcedon.103

These delightful gardens full of fountains were organized in a huge system that extended from the middle of a hill overhanging the sea to the shore. The complex formed progressively, adapting itself to the space and to the morphology of sloping terrain. As a result, there was a park formed by the articulation of a series of courtyard gardens, which Nicolay called “a friars’ cloister” (cloître) (fig. 4.6).104 It is notable that he refers to a Ottoman garden using an architectural term that makes semantic reference to a common and traditional form of Occidental architecture. But during the Renaissance the abbey cloister was no longer a model of princely garden architecture as it was in the Middle Ages, as someone with Nicolay’s cultural education would have known.105 For him, the Greco-Roman portico was a more up-to-date model for the regular and decorated French outdoor galerie or portique, such as the one built around the garden of the royal château d’Anet in 1546. This might also explain Pierre Belon’s negative judgment and preference for the garden of Saint-Maur, which, like the château d’Anet, was the work of Philibert De l’Orme.

The choice of the word “cloister,” which can be interpreted as a mislabeling of the aristocratic character of the
architecture of the Topkapı courtyard gardens, can also characterize its affiliation to a common cultural essence. Did Nicolay recognize in the sultan's gardens an architectural and transcultural schema? Was this resemblance an expression of old exchanges? According to Maurice Cerasi, some architectural solutions observed in Europe and in the Ottoman territories are so close and so common that they cannot be coincidental.106 It could be that the modality and frequency of the exchanges that existed under the Ottoman Empire were perpetuated throughout the Middle Ages and beyond. But for Cerasi, the dynamism of the “trade of models” makes it almost impossible to locate the precedence of one architectural form over another.107 In the Middle Ages, a common heritage of forms and ideas inherited from Greco-Roman antiquity was transmitted by the Catholic monastic orders, the Byzantine Greeks, and the Arab Muslims of the thirteenth and fourteenth centuries. The space centered on the open sky of Topkapı’s “cloister” portico is perhaps one of these models.108 But the men of the Renaissance were not conscious of this inheritance, even if Nicolay had, as it seems, a certain intuition.

Turkish Carpets, Gardens, and the Art of Memory

It has been demonstrated that many Islamic gardens reproduced the appearance of carpets in a formulaic way. This has been shown especially by James Dickie for some mid-fourteenth-century Hispano-Arab courtyards in the Alhambra Palace in Granada109 and for the Anguri Bagh (1628–37), a Mughal garden in the Red Fort in Agra.110 Giovanni Curatola has also revealed that the evolution of garden design during the Safavid dynasty in Persia (1501–1722) can be perceived in the decorative transformations undergone by gardens represented in figurative carpets.111 Other examples of artistic imitation and free interpretation of carpets have been recorded in the history of the art of decor. Friedrich von Lorentz’s research has shown that some textiles considered by artists as examples to be followed (paradeigma) are reproduced in ancient Greek mosaics. These results have been taken into cautious consideration, but on the whole they are widely accepted, and even made to include the pre-Romanesque or Romanesque period.112

Many scholars have noted that the decorative plan of Turkish carpets, divided into frames, borders, and compartments, was analogous to that of the early modern European aristocratic gardens of France, regardless of scale and material.113 In particular, Ada V. Segre remarks, “The ideal of gardens assimilated to carpets or tapestries found some expression at San Lorenzo in the Star-Centered Garden, with its design based on a carpetlike background”;114 and Luke Morgan notes, “Many of the terms used to describe features of landscape design are derived from domestic activities and items: the knot is based on the Turkish rug or carpet while the ‘Parterre en broderie,’ literally, the ‘Embroidered Parterre’ self-evidently recalls needlework.”

A passage from Le songe de Poliphile (1546), a French translation by Jean Martin (d. 1553), well known for his classical and modern editions, of the Hypnerotomachia Poliphili (Poliphilo’s dream about the strife of love, 1499),115 a famous Italian philosophical tale, gives a curious metaphoric description of a circular compartmented garden on the mythical island of Cythera. This passage should be read in association with the previous remarks made by scholars. Indeed, the description of this imaginary place, destined to be the prototype of the gardens à l’antique, makes reference to a strange amalgam of the rational geometrization of space and the decorative composition of a luxurious object imported from the Levant: “Between
this fence of box . . . , there is a sumptuous work, such as to dumbfound any human understanding, because from first sight it seemed to me that all the ground was covered by carpets from Turkey, with all the colors that the weaver may use, in various kinds of interlacings and foliage, as much Moorish as arabesque, some very clear and bright, others a little bit darker, or, to put it better, less apparent, but artistically done in a variety of figures.\footnote{117} This comparison between carpet and garden in the 1546 French edition exists in the original 1499 Italian edition only as a reference to the multicolored appearance of certain tapetti (carpets).\footnote{118} In Martin’s translation, the ambient exoticism led him to compare the architecture of the Garden of Venusto to the decorative composition of an Ottoman carpet, where notions of symmetry, proportion, regularity, and balancing of motifs are found. Here, in the material and courtly French culture, the taste for precious objects coming from the Levant merged with the art of the garden.

The importance attached to Turkish, Moorish, and Indian exoticism involves the aesthetic of mescolanza (mixture), which itself persisted because this metaphor was used, for example, by the Spanish historian, poet, and theologian José de Sigüenza (1544–1606) to describe the garden of the Escorial,\footnote{119} the residence of the king of Spain; by the anonymous author of the preface to Jacques Daléchamps’s treatise to describe the shape of the gardens of his time;\footnote{120} by Jacques Boyceau de la Barauderie (1560–1635), steward of the king’s gardens (intendant des jardins du roi), to explain how to create parterres;\footnote{121} and by Claude Mollet (1563–1650), gardener to the king of France, to describe his garden beds.\footnote{122} It has also been observed that this metonymic substitution operates in reverse in a French translation of Mateo Alemán’s (1547–1615?) picaresque novel Guzman d’Alfarache, in which a “parterre de Turquie” is a kind of carpet.\footnote{123} Similarly, “tapis de turquerie” were embroidered beds drawn by André le Nôtre (1613–1700) in the particularly admired garden of Vaux-le-Vicomte.\footnote{124} Finally, in the different kinds of garden beds described by Louis Ligier (1658–1717) in Oeconomie generale de la campagne ou nouvelle maison rustique (General rural economy, or The new country house, 1708), there is a “Turkish carpet” made with plants and aggregates: “Parterre: we can make it like a Turkish carpet, and for that we have to make the border with different-colored daisies. They are sown directly or are transplanted. In the middle the low scrolls are lined with red cement, the two in the middle are lined with black charcoal, and the other two are red. The lawn is in the shape of a heart, the clover too, and the two circles are red.”\footnote{125} We assume that this transgenerational transmission of associations by comparing images was the result of a cognitive process based on the art of memory.
In *Le songe de Poliphile*, this formal analogy between the humanist garden and an Ottoman carpet involves a method of knowledge transmission peculiar to the early modern era. As demonstrated by Dorothea Stichel, the steps taken by Colonna aim at the conservation and transmission of humanist knowledge during a time when books were a rarity.\(^\text{126}\) Also, according to Magali Jeannin-Corbin, relying on Mary Carruthers’s studies,\(^\text{127}\) in order to recall the specific knowledge of humanist culture, the whole tale of the *Hypnerotomachia* is punctuated with striking and exaggerated images that are easy to remember.\(^\text{128}\) Thus, Colonna’s objective is not to give back a faithful image of reality: his aim, which must be decoded, springs from an analogical and emphatic transformation of the visible world. The Turkish carpet would be among these phantasma meant to convey a potential of visual significance which must not be reduced to flowery figures of speech. It would in fact be a matter of *imagines agentes* inspired by the *Rhetorica ad Herennium* (90s B.C.E.), that is to say, striking and unusual analogical images which impress the memory.\(^\text{129}\) Here, the poetic idea of a garden laid out like a monumental and fantastic Turkish carpet is employed to create a memorable picture in the reader’s mind.\(^\text{130}\) Because of its geometric structure and aesthetic significance, this precious artifact astonishes the reader and thus becomes a mnemonic scheme for the architecture of the squared weft of the Renaissance garden decorated with beds.\(^\text{131}\) Obviously, the carpet was not an architectural and technical model for the design of gardens, but these important decorative features in paintings, such as the Holbein carpets often integrated into Occidental imagery as symbols of luxury as a part of the aristocratic habitus,\(^\text{132}\) could serve as a cognitive and pedagogical model that summarized the ideal proportions and ornamentations of the French Renaissance compartmented garden.\(^\text{133}\) In this way, the clothing aesthetic in relation to the art of memory we have mentioned above was perpetuated in the art of the garden.

**Conclusion**

Following the French-Ottoman political alliance after the defeat at Pavia, the arrival of Moorish Ottoman gardeners who practiced at Blois and Fontainebleau may be associated with two major events in the story of French gardens during the Renaissance: the supplanting of Neapolitan gardeners by Ottoman ones in the Loire Valley and the extensive construction of Fontainebleau near Paris. But we know little about the career trajectories of these two Ottomans. We still have no idea exactly where they came from or how they earned the king’s trust. We know that they were employed to cultivate royal gardens, but we do not know what skills and qualifications they had. So it would be desirable to undertake systematic archival research using possible unpublished accounts of Blois, Fontainebleau, Saint-Maur-des-Fossés, or other princely gardens where gardeners from the Middle East might have worked. Similarly, there is insufficient evidence to clarify the range of exotic plants in the gardens of Blois, Fontainebleau, Saint-Maur, and Touvoie at this time. Here also, research to locate accounts and contracts should be done. Research should also be carried out in examining letters and accounts from diplomats and merchants. It might be interesting to examine the scenario of *turqueries* dated 1541. Furthermore, research conducted in garden archaeology, especially palynology and dendrology, might be of interest.

At the time of the first French embassies to the Ottoman Empire, the architecture of gardens in France was not limited to botanical exoticism. Although Europe opened itself to the world during this period, French travelers’ tales do
not invalidate or put into question the Greco-Roman roots of the renewal of Occidental civilization and the important role of Italianism during the Renaissance. As we saw above, Pierre Belon thought some French and Italian gardens of his time were “more magnificent” than those he had seen in Turkey. At the same time, the descriptions of the Topkapi Palace complex by Pierre Gilles and Nicolas de Nicolay show that both these humanists evinced little interest in the architecture of the imperial garden courtyards. An extension of this part of our study would be to examine other travelers’ stories, but these sources would be secondary compared with the works by Belon, Gilles, and Nicolay.

Surprisingly, in the Songe de Poliphile and several other early modern documents, the appearance of princely gardens is described using a metaphor that acts as a “cognitive interface” involving Ottoman material culture integrated into Western decorative art. The “inner shape” of the garden architecture is presented as a monumental carpet covered with multicolored compartments filled with interlaced arabesques. The collection of plants in the manner of the exotica and naturalia of a cabinet of curiosities, and the idea of an aristocratic garden composed like a Turkish carpet, were linked to the chivalrous and epic imagination and were the manifestations of an anthropology based on a culture of the iconic and exotic object. It is certain that, at the time, the king of France and his entourage devoted themselves to symbolic collective practices, involving garden art, in order to appropriate a part of the infidel’s conquering strength. To this end, the courtiers reproduced a part of the habitus of the enigmatic and fairy-tale-esque Ottomans. This mimetic process implies a certain curiosity for “otherness” elsewhere in the world, one which is at the heart of an exoticism that perceives itself in masquerade, textile materials, and the cultivation of exotic medicinal herbs. But these aesthetic tastes sometimes only formed a mixture with the canon and with the Greco-Latin fundamental themes recently rediscovered by humanists. In sum, for the French aristocrats of the early modern period, these elements form ornaments, not only in the rhetorical meaning of the term, but also in the exotic meaning as different, conspicuous, curious, and hieroglyphic things.

NOTES


7. During the classical age, Ottoman travelers, it seems, loved the architecture of classical gardens that they saw in Europe, and many Turkish gardens created during this period reflected a desire to reproduce those forms. Cerasi has shown that from 1620 to 1750, the organic and syncretic architecture of Ottoman gardens retreated before the French model, which became predominant. During the seventeenth century, this influence led to the creation of the Sad-i-Abad’s garden: a large meadow with a linear canal and pavilions bordering it, without really involving controlled perspectives, coppices, or cropped hedges. Maurice Cerasi, “Istanbul, 1620–1750: Change and Tradition,” in John Calvin, Jean Calvin praelectiones in duodecim prophetas (Geneva: Jehan Crespin, 1559), translated into French as Lesçons et expositions familières de Jehan Calvin sur les douze petits Prophètes (Geneva: Nicolas Barbier and Thomas Courteau, 1560), 411.


9. The Italian War of 1494 began because the French backed a rival claimant to the throne of Naples.


11. Léon Palustre, La Touraine historique et monumentale: Amboise; Le château, la ville et le canton (Tours: L. Péricat, 1897), 191.


14. These exchanges have recently been the subject of the exhibition François Ier et Soliman le Magnifique at the Musée de la Renaissance d’Ecouen.


26. The concept of “désir mimétique” put forward by René Girard was used by Barbara Fuchs in Mimesis and Empire: The New World, Islam, and European Identities (Cambridge: Cambridge University Press, 2001) to characterize the resemblances produced by the exchanges between Oriental and Occidental cultures during the Renaissance. The deliberate imitation of the practices, habits, and speech of the colonizer could thus constitute a threat to the state’s legitimacy, because it contributed on the one hand to neutralizing its singularity, and on the other to eroding and so downgrading a duplicated “original.”

27. As Les comptes des bâtiments du Roi (1528–1571) shows.

32. Henri Zerner has emphasized the exotic character of Charles VIII’s travel. Henri Zerner, *L’art de la Renaissance en France: L’invention du classicisme*, new ed. (Paris: Flammarion, 2002), 35. We should remember that in 1494 Charles VIII wanted to extend his walk through Italy to la Grande Porte, to assert his hereditary rights to the old Byzantine Empire.
33. *Fié* (féé) is defined as “enchanté, magique, dû à un sortilège” (enchanted, magical, as in a dream). *Dictionnaire du Moyen Français.* Available at http://www.atilf.fr/dmf/.
34. Tirante il bianco valorissimo cavalière (Venice: Federico Torresano, 1538). Four copies of the Italian version are held at the Bibliothèque nationale de France.
36. Some men of letters, such as Guillaume Postel and Jean Bodin (1530–1596), referred in their writing to a “Turkish obsession.” We should remember that Postel first traveled in Turkey in 1536 and that Francis I named him chair in Oriental languages in 1539. During this period, philosophers and French travelers turned more readily to the Turkish world than to other places outside Europe. In his inaugural lecture at the Collège de France, Gilles Veinstein showed that the philosopher and philologist Postel was a great Turkophile, because he saw in the schismatics favoring Turkish domination in the east of Europe an intermediary step to Catholic domination. Gilles Veinstein, “Histoire turque et ottomane,” Leçon inaugurale du Collège de France, December 3, 1999, 2, available at http://www.college-de-france.fr/media/gilles-veinstein/UP148610_veinstein_li.pdf. Between 1480 and 1609 in France, twice as many books were published concerning the Ottoman Empire than relating to the New World. More French works devoted to Turkey exist than were published in any other European country except Italy (Merle, *Le miroir Ottomane*, 39).
37. According to Postel, the Bostangi (Bostanji) was selected from among the Christian children captured. The Bostangi bassi (Bostanji-bashi), who was master gardener, was exempted from his walk through Italy to la Grande Porte, to assert his hereditary rights to the old Byzantine Empire. The Bostangi *faizisi* was the superintendent of the gardens. “Bostangi, Jardinier, enfans de Christiens sujets & choisis.” Guillaume Postel, *La tierce partie des orientales histoires, ou est exposée condition, puissance revenu l’Empire Turquesque*. Available at http://www.college-de-france.fr/media/gilles-veinstein/UP148610_veinstein_li.pdf. Between 1480 and 1609 in France, twice as many books were published concerning the Ottoman Empire than relating to the New World. More French works devoted to Turkey exist than were published in any other European country except Italy (Merle, *Le miroir Ottomane*, 39).
41. It is important to note that this Ottoman gardener was given the apppellative *le More*, denoting Moorish origin. This nickname is not unusual in France, where it often designates people of Oriental or European origin with olive skin and dark hair. As Rachel Raus explains it, during this period the words *more* and *arabe* were attributed to Turkish people, because Ottoman hegemony led to the categorization of any Oriental as a Turk (Raus, “L’évolution de la locution ‘à la turque,’” 39–68). So we prefer the term “Ottoman” over “Turkish.” This name was also given to the duke of Milan, Ludovic Marie Sforza “il Moro” (1452–1508), because he was dark haired. “Frenchifying” the name of an artist or gardener according to geographical origin and appearance was a very common phenomenon in France. The famous royal artist Rosso Fiorentino (1494–1540), known as “Le Maître roux de Florence” in the French royal archives, was actually named Giovanni Battista di Jacopo. However, the original names of gardeners Jérôme de Naples, Henri de Calabrese (from Calabria), and Pierre l’Italien (Arch. nat., Acquis sur l’épargne, J. 962, pl. 15, n° 16, anc. J. 961, n° 210, in Académie des sciences morales et politiques, *Catalogue des actes de François Ier*, vol. 3, 1. Janvier 1535–Avril 1539, Collection des ordonnances des rois de France (Paris: Imprimerie nationale, 1889), who were all highly placed in the hierarchy of princely servants, are still unknown. Similarly, Guillaume le More might have been so named for ease of use. But it might also have signified his conversion to Christianity as a sign of loyalty to the king, comparable to that of the Moorish diplomat Joannes Leo Africanus (John Leo a More) (c. 1494–c. 1554), which occurred in Rome in 1520. As noted by Christine Isom-Verhaaren, “Dynastic loyalty, that is loyalty to an individual ruler, was the key to elite political identity during this period. Religious identity was becoming a part of this political identity as conversion, whether from Christian to Muslim, or Protestant to Catholic, came to be required as a sign of political loyalty.” Christine Isom-Verhaaren, *Allies with the Infidel: The Ottoman and French Alliance in the Sixteenth Century* (London: I. B. Tauris, 2013), 81. It should be noted that Guillemin is a hypocoristic nickname for Guillaume; it is natural to assume that the king had some familiarity with his gardener, as Pope Leo X had with Leo Africanus. We know that other high-ranking Ottomans became servants of European kings, although they were diplomats or military commanders, not gardeners.
44. Smith, “François Ier.”
45. This was a privilege, even though by 1534 the monarch principally lived in Paris and its surroundings.
46. Barbarossa, who was born on the island of Lesbos/Mytilene, won naval victories that secured Ottoman dominance over the Mediterranean during the mid-sixteenth century.
49. Notwithstanding the above, it is still possible that this Oriental gardener was a high-ranking prisoner like Leo Africanus. It is also possible, but unlikely, that they had come from Spain, where Moorish converted gardeners were servants to Charles V, because Turkey is referred to in the extract from *Les comptes des bâtiments du roi* mentioned previously.
51. The Janissaries (new soldiers) were elite infantry recruited from Christian boys in their early teens converted to Islam.
53. Ibid., 116–42.
56. Penni and Fantuzzi were Italian painters and printmakers.
58. Francesco Primaticcio was an Italian Mannerist painter, architect, and sculptor who spent most of his career in France. Following the intellectual circles brought together by Cardinal de Bellay. De facto, Pellicer was one of the promoters of the Renaissance in France.
62. "A messire Passello de Merculiano, jardinier du Roy, la somme de trois cents livres à prendre sur le receveur ordinaire de Bloys pour sa pension et entretien durant cette présente année" (Laborde, *Les comptes des bâtiments du roi*, 2:209); "A Bastien Tarquin, jardinier ordinaire de la Royne, mère du Roy, audict grand jardin du palais de Sa Majesté, sur et tant moings de ce qui luy peut estre deu de ses gaiges a cause dudit estât de jardinier, à raison de trois cents livres tournois par an" (ibid., 2:347).
65. Pellicer was already a brilliant humanist when he was named bishop of Maguelone in 1526. Knowledgeable in law and natural sciences, he translated Latin, Greek, Hebrew, and Syrian. A good friend of the writer François Rabelais and the naturalist Guillaume Rondelet, he was no stranger to the intellectual circles brought together by Cardinal de Bellay. De facto, Pellicer was one of the promoters of the Renaissance in France.
66. In a letter in 1540 to François Rabelais, he clearly mentioned his interest in the culture and the study of botanical curiosities: "Je attendz en grant dévotion des racines de la nardus celtica et de l’anthora avecques leurs terres dedans quelques petites boyestes, pour s’il est possible les faire alumnas et citoyennes en nostre jardin de cette ville; et avecques ce des aultres telles pour la médecine, comme n’avez mandé vouloir faire."
68. "Croissent d’eux-mêmes en Barbarie." According to Daléchamps, these vegetables "ont la coste fort vert tirant sur le noir." Charles Estienne, *De re hortensi libellus*, vulgaria herbarum, florum, ac fruticum (Lyon: Guillaume Rouille, 1615), 727.
73. The exact location where it was introduced is still unknown.

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74. For the story and an inventory of plants introduced from Turkey, see Harvey, "Source," 21–42.

75. It is often claimed that the first importations of plants from Turkey date from Pierre Belon’s journey, but the presence of the Le More brothers and commercial exchanges during the scandalous alliance show that they are older. Belon was a French naturalist who studied medicine at Paris and became a pupil of the botanist Valerius Cordus (1515–1544). Under the patronage of Cardinal François de Tournon (1489–1562), who furnished him with the means to undertake a scientific journey, he traveled through Greece, Crete, Turkey, Egypt, Arabia, and Palestine. A full description of this expedition was published in Pierre Belon, *Les observations de plusieurs singularitez et choses remarquables trouvées en Grèce, Asie, Judée, Egypte, Arabie* (Paris: C. Corrozet, 1533).


79. Although it is unknown who first brought the tulip to northwestern Europe, according to popular mythology it was Oghier Ghislain de Busbecq (1522–1592), an ambassador for Emperor Ferdinand I (1503–1564) to Suleiman the Magnificent in 1554–56. However, an account from 1559 by Conrad Gesner (1516–1565) describes tulips flowering in Augsburg in the garden of Councillor Heinrich Herwart (Goldgar, *Tulipmania*, 32; Sahni, *Multi-stories*, 73).

80. A recent study found that the tulip was an ornamental plant cultivated in Spain during the Middle Ages. J. Esteban Hernández Bermejo and Expiración García Sánchez, "Tulips: An Ornamental Crop in the Andalusian Middle Ages," *Economic Botany* 63, no. 1 (2009): 60–66. We have seen the graphic representation of numerous tulips in a book of hours dated 1510–15 attributed to Simon Bening, *Book of Hours, Use of Rome*, Bibliothèque municipale de Rouen, ms 3028.

81. Estienne, *De re hortensi libelli*, 49.


83. From modest origins, Pierre Belon became an apothecary with eminent ecclesiastical patrons such as the archbishop of Mans, René du Bellay, and the archbishop of Lyon, François II de Tournon. These protectors permitted him to devote himself to his scientific research. He took botany lessons from Valerius Cordus in Wittenberg and traveled with him in Germany.


86. Ibid., 51.

87. Ibid., 32.

88. Ibid., 34, 35, 39–42.

89. Started in 1541 and finished in 1547 by Philibert De l’Orme (c. 1514–1570), the castle of Saint-Maur near Paris constituted the first work of importance undertaken by this famous architect. Constructed on a small promontory dominating the Marne, his seat overlooks the old abbey of Saint-Maur, whose abbot was Cardinal du Bellay. In spite of various testimony showing the ambition of the project and the cardinal’s interest in horticulture, it is risky to propose a picture of these gardens on the basis of the available sources. However, we know that the gardens of the castle de Saint-Maur were certainly the achievement of an ambitious and innovative project. For some authors, this castle was the utopian abbey of Thélème imagined by François Rabelais, but such a view is unlikely to correspond to the actual gardens, for which no drawing has been discovered. A second garden was certainly remodeled in 1563, when Saint-Maur became the royal castle through its sale to Catherine de Medici. It is the plan of this extraordinary garden that appeared in Jacques Androuet du Cerceau’s *Les plus excellents bastiments de France*. His testimony is fascinating: we can see an exact depiction of decor in the form of an Oriental carpet. However, it cannot be seriously claimed that this is a representation of a real garden, such as was used twenty years before by De l’Orme in du Bellay’s service, and compared by Belon to the Ottoman gardens. In disgrace following the death of François I, Jean du Bellay went to Rome, where he installed a palace garden next to the thermae of Diocletian.

90. His journey, which started with the French ambassador Gabriel d’Aramon, became a diplomatic mission: for two years Belon lingered in the Ottoman lands and visited Greece, the Holy Land, and Egypt, and not only Constantinople but also Anatolia.

91. "Parquoy les Turcs ont les jardinages en aussi grande recommandation que nous, & font grand diligence de recouvrer des arbres estrangers & sur tout qui portent belles fleurs, & n’y pleignent l’argent" (Belon, *Les observations*, fol. 368v).

92. "En cherchant leurs plantes, nous sommes souvent trouvez à voir les jardins: mais onc n’en ve’est a voir les jardins: mais onc n’en veismes un plus magnifique que celuy de la seigneurie de Venise à padoue, dont mon seigneur Daniel Barbarus P[a] triarche d’Aquilée, homme de grande entreprise, & excellenc en scavoit, en esté l’auteur. Le second d’après, en nostre France à S. Mor près de Paris” (ibid., fols. 369v–370r).

93. His layout, authorizing at the same time a spatial classification of the plants and a decorative geometrical partition, was a model for almost all the botanical gardens during the Renaissance. This model was also the basis for all the gardens ornamented with beds, since it was one of the first to be constructed in *compartimenti*.

94. Belon went to England to see the bird collections owned by the Venetian ambassador.

95. For more information on the “turco-anatolien” gardens, see Gönül Eýapan, *Old Turkish Gardens: Old Istanbul Gardens in Particular*.
Au milieu d’une colline se voit, un beau & délectable iardin, lequel commençant sur le milieu du mont va en descendant vers la mer. Là sont plusieurs maisonnées & habitations, avec un porc soustenu par colonnes à la mode d’un cloître de moines: à l’entour duquel, se treuent environ 200 chambres, & tout au bout le Seigneur habite la plus part. . . . Un peu plus bas y avoit une autre petite habitation, toute faite de voire clair, joint & lié avec verges de fin estain en forme de cupule ronde ou Hemisphere. Et par dessus avec admirable artifice passoit une belle & claire fontaine: laquelle doucement découlant en bas par la cupule se respointoit par le iardin. Et en ce lieu Baiazet s’alloit souvent se refreschir en este & y passer son sommeil aux doux murmurement des eaus. Mais à present estant la plus part en ruine, leau a prins sou cours en autres endroits. En cest endos est encore le Sarail de la Sultane femme du grand Turc, accompagné de bains tres magnifiques. Cette court a une belle fontaine au milieu environnée de plusieurs beaux arbres de Cyprez. Au bas du iardin vers la poindre du Sarail qui est batue de la mer, y a une autre porte joignant laquelle y a un petit pavillon, par où le Seigneur de va embarquer quand il se veut aller cibatre au iardin, qu’il a fait faire en la Natolie au lieu appelle par les Turcs Scutary, des anciens Calcedon. (Nicolay, Navigations, 95–97)

104. See, for example, the plan of Istanbul drawn by Gülru Necipoğlu from the manuscript by Matrakçı Nasuh. Necipoğlu, Architecture, Ceremonial, and Power, 270.
105. Nicolay, who in his Navigations interprets various Greco-Roman sites he visited and makes reference to classical authors, was evidently familiar with the basic elements of the artistic theory of his time.
107. Ibid., 116.
108. In the second court of the Topkapi Palace, the justice court, as represented in the Ottoman illuminated manuscript Hünernâme, vol. 1 (c. 1584), the internal structure of the garden is not symmetrical. Thus, we cannot recognize the garden’s division into the four squares reputed to be common to both Oriental and Occidental gardens, and which should symbolize the layout of the Eden or Paradise garden. Topkapi Palace, Second Court, in Hünernâme, vol. 1 (c. 1584), TSM H1524, fol. 237v; Topkapi Palace, Second Court, in Hünernâme, vol. 1, TSM H1523, fols. 18b–19a; Topkapi Palace, Harem, in Hünernâme, vol. 1, TSM H1523, fols. 231b–232a. This paradigm is rightly questioned today: see Jean-Dominique Brignoli, “Les palais royaux saffavidés (1501–1722): Architecture et pouvoir” (Ph.D. diss., Université de Provence, 2009). Necipoğlu notes that of all the Ottoman royal gardens from the sixteenth and seventeenth centuries in Turkey, the Karabah Garden is the only one endowed with a “quadrirpartite plan” (Necipoğlu, “Suburban Landscape,” 32–71). In reality, the general profile of Karabah is egg-shaped, with several pavilions gathered together, forming a garden that “boldly overrides the traditional forms and appears without doubt as the least formal of all the Muslim geometrical gardens” (Brignoli, Les palais royaux saffavidés, 100).


116. This work is about the adventures of Polifilo in search of his beloved Polia. His journey takes place in a fantastic dreamworld of pyramids, obelisks, gardens, ruined temples, bacchanalian festivals, and exotic curiosities, whose description served as a sort of humanist encyclopedia. See Woodbridge, *Princely Gardens*, 23–36.

117. “Entre ceste clôture de buis . . . se trouvoit vn ouvrage sumptueux, pour esbahrir tout entendement humain, car de prime face il me sembla que toute la terre estoit couverte de tapis de Turquie, assortiz de toutes couleurs à l’intention de l’ouvrier, conduitz en diverses sortes d’entrelas & feuillages tant Moresques comme Arabesques, les unes plus vives et claires, les autres vn peu plus obscures, ou pour mieulx dire, moins apparantes, mais artistement accordées en variété de figues.” Francesco Colonna, *Hypnerotomachie*, ou discours du songe de Poliphile déduisant comme amour le combat à l’occasion de Polia (Paris: Jacques Kerver, 1546), fol. 113v.


125. “Parterre: On peut en faire tapis de Turquie; & pour cela il faudra faire la bordure émaillée avec des marguerites de différentes couleurs; ou les sève, ou bien on les prends de touffes enracinées: le milieu aura les rainceaux d’en-bas remplis de ciment bien rouge; les deux du milieu seront noirs, c’est-à-dire de charbon pilé; & les deux autres seront rouges: le cœur sera de gazon, le trefle de même, & les deux rouges.” Louis Ligier, *Oeconomie generale de la campagne ou nouvelle maison rustique* (Paris: Prudhomme, 1708), 147.


127. Other disconcerting cognitive systems of images generated by the art of memory have been identified by Mary Carruthers in medieval visual and decorative arts. She demonstrates the link between cognitive images and ornament in *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400–1200* (Cambridge: Cambridge University Press, 1998), 116–75. She gives special attention to carpet pages from manuscripts in *The Book of Memory: A Study of Memory in Medieval Culture*, 2nd ed. (Cambridge: Cambridge University Press, 2008), 333–35.


130. In *Examen de ingenios para las sciencias* (The Examination of Men’s Wits), a significant work in the history of psychology, the first Spanish edition of which dates from 1575, Juan Huarte (1529–1589) theorizes on this principle of cognitive mediation through the image of an artifact as mental scheme and project.


133. This reflects Panofsky’s theory; he argues that the aesthetic rules of composition of Gothic architecture were isomorphic to the habits inculcated by the medieval scholastics (Panofsky, *Architecture and Scholasticism*, 21). This also reflects the philosophy of Wilhelm von Humboldt, because the Turkish carpet metaphor is a “revelation of the inner truth of shapes which is obscured in their appearance in reality.” Wilhelm von Humboldt, “The Task of the Historian” (1821), in *The Hermeneutics Reader: Texts of the German Tradition from the Enlightenment to the Present*, ed. Kurt Mueller-Vollmer (New York: Continuum, 1989), 109. In his theory Paul Ricoeur has generalized this performative power of the metaphor. See *The Rule of Metaphor: Multi-disciplinary Studies in the Creation of Meaning in Language* (London: Routledge and Kegan Paul, 1976).
Renaissance European and early Mughal Indian gardens are not obvious bedfellows. Fundamental differences existed in their creation and utilization: European sites traditionally started from the house, with the gardens added as a secondary or complementary feature, while Mughal designs frequently focused on the garden, with structures such as pavilions enhancing the ways in which it could be used and enjoyed. Many early Mughal gardens were temporary creations, laid out amidst attractive natural scenery and furnished simply with carpets and tents, while the more architectural European gardens were intended to be permanent, with substantial earthworks often necessary for their creation. The differing climates led to contrasting use of gardens across the two regions: particularly in northern Europe, the scope for major pageants and other outdoor activities was limited to, at best, a few months in the summer, while mild, dry Indian winters meant that Mughal gardens could be used for entertaining all year round.

Yet, in the sixteenth century, gardens in both regions exhibited new relationships with dwellings, the cities they inhabited and adjoined, and the broader landscape context. Gardens were created in new, previously unexpected locations, often away from fortified urban centers, and engaged with their surroundings in novel ways. Moving away from the medieval European and Islamic model of enclosure and protection, Renaissance and early Mughal gardens were increasingly designed to offer views beyond the immediate site, and a sense of the broader landscape setting as an essential experience of the garden. Instead of being inward-looking places of safety and retreat kept deliberately separate from the wildness of the surrounding landscape, gardens now became a way of demonstrating humanity’s dominance over nature and, even more than dwellings,
were designed as visible testimony to the wealth and power of the garden’s owner.

This chapter explores this changing relationship in both Renaissance Europe and early Mughal India between gardens and their surroundings through an analysis of instructive texts, biography, autobiography, travelogues, poetry, paintings, and plans. It reveals shifting relationships in both regions among the natural world, the garden, and the city, with evidence that gardens in the sixteenth century started to symbolize man’s new confidence about his place in the world. In terms of scope, the chapter considers the gardens created by the first Mughal emperor, Babur, across Central Asia, with a focus on those in the area he termed Hindustan; the two Renaissance European case studies are chosen as significant early examples of French and Italian style, and are contemporaneous with the early Mughal gardens. While the main focus is on the sixteenth century, I refer briefly to the political and social shifts over time in each region that led to an increased focus on the wider landscape, and consider how far its inclusion as part of the garden experience came to influence urban expansion and city planning.

Renaissance Garden Principles

The European Renaissance was, of course, marked by a new interest in classical antiquity and, in architecture and gardens, by a wish to revive the scale and rhythmic forms of imperial Roman architecture, with designs much influenced by the writings of Vitruvius and Pliny the Younger, and by classical fragments such as Hadrian’s Villa. So great was its influence on Renaissance design, it is worth quoting Pliny’s description of his villa rustica at some length, as he praises the advantages of its situation, and the extensive view of the sea coast . . . a sort of turret which has two rooms below, with the same number above, besides a dining-room commanding a very extensive look-out on to the sea, the coast, and the beautiful villas scattered along the shore line. . . . At the upper end of the terrace and portico stands a detached garden building, which I call my favourite; my favourite indeed, as I put it up myself. It contains a very warm winter-room, one side of which looks down upon the terrace, while the other has a view of the sea, and both lie exposed to the sun. The bed-room opens on to the covered portico by means of folding-doors, while its window looks out upon the sea.3

Pliny’s was thus a dwelling that blurred the distinctions between house, garden, and surrounding landscape, with outward-facing terraces, porticos, open galleries, and colonnades, all designed to allow him and his guests to appreciate the natural world around them, to benefit from sea breezes, and to enjoy the spectacular views. Leone Battista Alberti’s early and highly influential Renaissance architectural treatise De Re Aedificatoria (written c. 1452) shows the strong influence of Pliny and Vitruvius, arguing that villas should be sited in places with healthy climates and pleasing views of human habitations or natural scenery: thus, people could “enjoy all the Pleasures and Conveniences of Air, Sun and fine Prospects.” The phrase is strikingly similar to the one used as the title for this chapter, which is a description not by Alberti but by the Mughal emperor Babur of the principal elements of a garden he admired. Alberti’s model European garden was still enclosed (which he advised as “a very proper Defence against Malice or Rapine [robbery]”), but laid out to make the best of the warmth of the sun in winter and the coolness of shade and breeze in summer,
to encourage an enjoyment of nature, and to provide the sudden pleasure of “a large Prospect.”

Château de Gaillon

Early signs of the influence of Pliny and Alberti on the relationship between French Renaissance gardens and the broader landscape can be seen at the château de Gaillon, in Normandy (fig. 5.1). Originally a medieval fortress virtually destroyed by the British in 1424, the château was reconstructed largely by Cardinal Georges d’Amboise (1460–1510), first minister to Louis XII, in the first decade of the sixteenth century. Amboise was an enormously powerful figure, seen by many foreign visitors as “the real king of France,” and he maintained his own splendid court at Gaillon. He was also a great patron of architecture, and his buildings were much influenced by his familiarity with Italy: he had led French attempts to conquer Milan, and served as ambassador to Trent. In the autumn of 1503 he stayed at the Vatican, when he had hoped to be appointed pope, just as Bramante was being commissioned to design his great belvedere there, and he was familiar with the works of Alberti. In some respects his château at Gaillon was a traditional fortress, standing in a strategic location on high ground above the river Seine on the main road between Paris and Rouen, and displaying elements of medieval Gothic style. It was also, however, designed as a dwelling house, with fine decorations and dramatic views of the wider landscape provided for the pleasure of its occupants, and its elegant proportions and sumptuous ornamentation owed much to Italian influences. It is usually regarded as the first Renaissance château in France.

Although the gardens at first followed the medieval model in being completely enclosed, a raised terrace or gallery (la galerie sur le val), resting on open arcades, ran along the edge of the main house at first-floor level and offered vast views over the river Seine and all the lands owned by the cardinal, giving visitors a dramatic, tangible illustration of his wealth and his dominion over nature. As art historian Jean Guillaume has argued, the idea of such a gallery was copied directly from Italian models, especially from Bramante’s villa in Rome, and in turn influenced new additions to the existing French châteaux at Chenonceau and Fontainebleau. The prospect from the gallery at Gaillon was much admired; one Italian visitor in 1510 wrote that “from this gallery you can see the noble river of the Seine and around five or six leagues owned by the cardinal, with game parks, dovecotes, fishponds, and other fine, pleasant places, so that the view could not be more beautiful or enjoyable.” The placement of such open spaces alongside dwellings (at Gaillon, the gallery was entered from the cardinal’s own chamber) developed from a new desire to view surrounding gardens and landscapes, and to be able to enjoy light and air, without leaving the château. It was perhaps a wish to join together inside and out, and a recognition that nature was no longer perceived as wild and threatening, but as something to be admired and capable of being mastered.

As noted above, the original pleasure gardens at Gaillon were completely enclosed, laid out beyond the formal courtyard, on previously sloping ground especially leveled to create an extravagant geometric design, with a central pavilion that included little aviaries and a garden house, both of which provided inward-looking views of the gardens from above (fig. 5.2). There was originally no relationship between the formal gardens and the wider landscape. (The large kitchen garden and orchard shown at the bottom of du Cerceau’s plans were installed later than these pleasure gardens, probably not until c. 1560.)
Contemporary aerial view of the château de Gaillon, showing its strategic position above the Seine in Normandy.
The Wider Surroundings

Given the acclaimed vista from the open gallery running along the château, described above, it was not long before similar views of the wider landscape were revealed from the enclosed pleasure gardens, when windows were added to the garden wall to create a new viewing gallery, probably by a subsequent owner of Gaillon in the second half of the sixteenth century. The windows are clearly visible in some of du Cerceau’s drawings of the property, and he describes the resulting prospect with much admiration.

One other feature at Gaillon is also worthy of mention, as it reveals a very different approach to the melding of garden and wider landscape. A mysterious garden outside the walls is depicted only in du Cerceau’s drawings (fig. 5.3), and is mentioned only fleetingly in a few sixteenth-century texts. It was a secret garden, consisting of a rocky hermitage, a chapel, and an elaborate, moated pavilion called the “maison blanche” (white house), looking out over a canal and fountains. Probably constructed in part in 1503–6, during the time of Georges d’Amboise, the secret garden was reworked in 1566 for theater performances before King Charles IX and his mother, Catherine de Medici. One of du Cerceau’s inscriptions marks the pavilion as “the colonnaded building where the king drinks and eats.” Du Cerceau labeled the garden a “bel vedere” and described
the uphill walk there from the pleasure gardens through trees and terraces with dramatic views over the Seine valley. In more detailed drawings of the area, the maison blanche appears as a marbled pavilion, surrounded by water, with six open arches and an ornate viewing platform with balustrades above, allowing visitors to grasp the relationship between this small, secret place, its surrounding parkland, and the wider context of the château and the valley below, which, even if not visible from the viewing platform, would be fresh in the visitor’s mind from the walk to the garden. The pavilion calls to mind the open, rectangular kiosks seemingly floating on water that proliferated around Istanbul in the Ottoman Empire. With their high situations, fine views, and sumptuous decorations, these small structures were designed for tranquil, private outings away from the main palace, and as discrete places for receiving important guests.10

At Gaillon, we can thus see early signs of French gardens breaking out from the confines of castle walls and placing a new value on the views and vistas available around previously enclosed gardens, both through the windowed gallery subsequently added to the walled pleasure gardens and through the mysterious arcaded belvedere in the woods, with its views over water and beyond. These changes were inspired in part simply by the glorious, much-fêted prospect from the gallery running alongside the cardinal’s apartment, but they also show the influence of ideas from abroad about the increasing importance of the wider landscape in defining and demonstrating power, and conversely in offering peace and seclusion from the noise and commotion of court life.

Villa Madama

While Gaillon offered controlled glimpses of its broader surroundings within a largely medieval model of enclosure, Italy’s Villa Madama was to transform the relationship between city, landscape, garden, and dwelling. Villa Madama, one of the most celebrated and influential Renaissance villas, was built on the Monte Mario, just outside of Rome, for Pope Leo X (1475–1521) and his cousin Giulio de’ Medici, subsequently Pope Clement VII (1478–1534). Begun in 1518, Villa Madama was the first important villa constructed in the Roman countryside, and the second great Renaissance building, following Bramante’s belvedere, an enclosed, defined space that had itself transcended the previous, soulless attempts at exact reconstruction of classical Roman buildings. Villa Madama was designed and constructed for its wealthy, powerful clients by an illustrious team that included Raphael and Antonio de Sangallo the Younger, and although only a fraction of the original design was ever executed, it was radical in its approach and enormously influential on subsequent garden design. The small number of living rooms constructed were joined to the garden terrace by a large open loggia decorated with exquisite frescoes that merged the indoor space with the outside, serving the same function as the gallery and pavilion at Gaillon (see fig. 5.4 for a plan of Villa Madama as built—the gardens originally extended considerably farther from the house than shown in this later drawing—and fig. 5.5 for a modern-day view of the loggia). The gardens themselves seem to have been intended as the main feature of the site, with plans for an immense, asymmetrical series of outdoor rooms and terraces making the most of the complex topography. They were to be arranged the length of a spectacular double axis, one running along the hillside and the other perpendicularly down to the Tiber in the valley below.

Perhaps most significantly, the villa was placed high on the hills above Rome, with dramatic views over the city, and was intended as a papal retreat for the Medici as well as a stopping point for visitors to rest and refresh before their ceremonial entry into Rome or the Vatican. The Florentine ambassadors in 1523 were among those who used it in that way, its lofty position allowing them to contemplate the city they were about to visit. Just as we have seen at the château de Gaillon, the villa’s elevated position on a hillside offered superior defensive capabilities, with towers and turrets designed to provide early views of approaching attack.
Again as at Gaillon, the position of the villa and the views it offered were explicitly intended as a physical representation of the owner’s dominance, here over the city and the great river. The sweeping views of Rome and the Vatican far below in the valley were to impress visitors, symbolizing the mastery of the Medici over their surroundings and indicating the magnificence and power of the family (fig. 5.6).

The original intentions for the villa are set out in detail in a 1519 letter attributed to Raphael, which makes it clear that the great designer saw Villa Madama as a modern interpretation of imperial Rome: as landscape and architectural historian David R. Coffin has argued, the letter is stylistically very similar to Pliny’s description of his own villa, quoted above, describing the same features that Pliny evoked, and even using some of the same Latin terminology.14 Thus, Raphael explained how the design for Villa Madama took full advantage of its hillside location, with the fine prospects it offered, and the site and the buildings laid out to make the best of the weather, offering shaded spots for eating in summer and sunny places to enjoy in winter; how a circular garden room was planned to be “very cheerful, as a result of the constant sun and the views of Rome and the region,” while from another vista “you can see straight to the street that runs from the villa at the Milvian bridge, beautiful scenery, the Tiber and Rome” and elsewhere “by the poolside at the bottom of the steps facing north, there is a very pleasant terrace for meals, for catching cool breezes and enjoying the view” (my translation).15

In its ability to allow the viewer both to enjoy the natural scenery of the surrounding landscape and to feel a sense of dominion over the great city in the valley below, the prospect from the Villa Madama reverberates through the centuries: over two hundred years later, the architect Giuseppe Vasi found the villa in poor condition but still admired how “this delightful place has a view overlooking

55. The frescoed loggia at Villa Madama, designed to link the living space with the extensive gardens.
the Quinzi meadows and the Tiber as far as the Milvian Bridge, and from its loggia perched high among the trees, all of Rome opens up into view.16

Renaissance villas such as the Villa Madama were prec- edents that influenced the relationship between dwelling, garden, and broader landscape for two hundred years and, with their axial layout and new, confident connection with their surroundings, surely also influenced the reorganiza- tion of medieval cities in terms of spatial relationships, with new circulation patterns built around views and landmarks in the Pope Sixtus V plan of c. 1590 for Rome, and the extraordinary reworking of urban Paris by Henry IV from 1594. Later, the vast Baroque axes of Le Nôtre and his followers, with their incorporation of views of infinity into the great gardens of the age, were again to influence city planning, with the dramatic changes introduced to Paris by Napoleon III and Haussmann in the mid-nineteenth century and their subsequent impact on major cities around the Western world.

Mughal Indian Gardens

At the same time that powerful and wealthy figures in Europe were enjoying gardens that engaged with their surroundings in new ways, similar approaches and attitudes...
could be found in the gardens created by the new Mughal dynasty in India. Early Mughal gardens are less well preserved and less extensively documented than European gardens of the same period, and so, rather than choosing two discrete case study sites, this section of the chapter will explore more widely the work of the first Mughal emperor as a creator of gardens and his, and their, relationship both with the citadels they often served and with the wider landscape.

Zahir al-Din Muhammad Babur Padshah Ghazi, known as Babur (1483–1530), was a ruler from modern-day Uzbekistan, claiming descent from both Timur (Tamburlaine) and Genghis Khan. His extraordinary diary or autobiography, the Baburnama, gives a detailed picture of his experiences as warrior, poet, musician, and creator of gardens. His life was one of shifting political alliances and frequent military expeditions across Central Asia, a tale of battles and treachery, skirmishes and sieges, as he conquered and sometimes subsequently lost great cities such as Kabul, Samarkand, and Herat. In 1526, he became ruler of much of northern India, establishing over three hundred years of what became known as the Mughal dynasty.

Given the pleasant climate and peripatetic lifestyle enjoyed by Babur, he spent much of his life in the open air. It is clear from the Baburnama that he had a great interest in and love for nature, frequently stopping to admire and describe an unusual flower or novel beast; and so it is unsurprising that he seems largely to have based himself not in citadels but in gardens. To a great extent, gardens were the home of Babur’s court, serving as meeting places, arenas for receiving and entertaining guests, and places for rituals and celebrations. In the Baburnama he writes frequently of long-cultivated gardens as the sites for extravagant parties with wine being drunk in tents or under the shade of apple trees, of eating grapes or drinking fine vintage wine in gardens “beautiful with autumn.” Such parties would often follow from other outdoor events, such as witnessing a harvest or taking part in a hunt. For Babur’s army, established gardens also functioned as landmarks, with frequent descriptions of his
army resting in, setting off from, and navigating past gardens, giving us a strong sense that these are not enclosed places subservient to adjoining buildings, but features in the landscape in their own right, serving as important points of reference for these military travelers. As well as such established sites, Babur and his army also created more temporary garden encampments as they marched through the region on military campaigns, assembling quickly and conspicuously in whichever attractive or advantageous spot the emperor chose on his travels, the site rapidly claimed as theirs with displays of tents, pavilions, carpets, and other transient garden features (fig. 5.7). These garden encampments served as both refuges from attack and vantage points from which to attack.

Although Babur writes of praying in his garden, asking for a sign of victory before deciding whether to attack the Lodhi dynasty in northern India, there is little evidence from his autobiography that he was much interested in the paradisiacal or religious symbolism of gardens. To him, these sites were places both to enjoy nature and physically to demonstrate his claim on new territories and his ability to subdue and control other lands and other peoples.

The gardens created by the first Mughal emperor were inspired by the existing Persian-influenced gardens he saw in his travels across Central Asia. The fourteenth-century gardens laid out at Samarkand and elsewhere by his ancestor Timur (1336–1405), in an empire that centered around modern-day Iran, Afghanistan, and Uzbekistan, were enclosures full of pomp and display, with fruit trees, flowing water, fountains, silken tents, and scented plants, where great feasts, celebrations, and important meetings were held. As the geographer and Islamic architectural historian James L. Wescoat points out, although the city would no doubt have contained some gardens within its perimeters, all the old Timurid gardens Babur admiringly described at Samarkand lay outside the city walls, thus suggesting his preference for gardens that engaged with the surrounding landscape. He praises a garden there as one of the joys of Samarkand and proclaims, “For beauty, and air, and view, few [gardens] will have equalled Darwesh Muhammad Tarkhan’s Char-bagh. It lies overlooking the whole of Qulba meadow, on the slope below the Bagh-i-maidan [Garden of the Plain]. Moreover it is arranged symmetrically, terrace above terrace, and is planted with beautiful elm and cypresses and white poplar.”

With its stress on the advantages of fresh air and vistas, his description is a striking parallel with Alberti’s advice to Renaissance gardeners, and Babur’s portrayal could almost be of the Villa Madama, with its similar position on a slope, looking over meadows, and with terrace upon terrace running down the hillsde. Such vistas played more than an aesthetic role for Babur: his autobiography also gives a strong sense of the importance of views and viewing in his military planning, as he frequently describes using high ground to allow him to see his enemies and to be seen by them; he also writes of climbing up to view his camp from above and thus more easily see and assess his resources.

Babur’s Early Gardens Outside India

Babur’s early gardens, laid out on the hilly lands around Samarkand and Kabul, were often created about a beautiful natural feature, such as a spring or a fine prospect, to which, as Wescoat has noted, pools, plantings, and seats or pavilions would then be added. Babur’s wish to enhance and engage with the landscape was coupled with an admiration for nature’s permanence and timelessness in comparison with man’s fleeting life: in that vein, he ordered an inscription to be carved near a tomb that was located next to a spring feeding the Zarafshan River in Samarkand:

The Wider Surroundings
5.8 Bishndas and Nanha, *Babur Supervising the Laying Out of the Garden of Fidelity*. Opaque watercolor and gold on paper, 8.5 × 5.6 in. painted surface (right half); 8.7 × 5.4 in. painted surface (left half). Double-page composition from an illustrated Persian translation of Zahir al-Din Muhammad Babur’s *Baburnama*, c. 1590. © Victoria and Albert Museum, London.
I have heard that King Jamshid, the Great,
Inscribed on a rock at a fountain-head:
"Here at this spring many like us took rest,
And in the twinkling of an eye were dead;
We took the world with mighty swords and braves,
But we took it not with us to the graves."28

There are other glimpses in Babur’s autobiography of how the early gardens that he created engaged with their surroundings: he wrote, for instance, of a site he called Bagh-i Safa (the Garden of Purity) in Kalda-kahar, in the north of modern-day Pakistan, where he chose to lay out a garden in an “excellent meadow” that he discovered on a hillside, with a view over a large lake and a spring to one side, thus enhancing what he described as “a charming place with good air.”29 Another garden with the key features of water and a vista was laid out near the river at Khwaja Basta (Kabul), with a reservoir and plantation of young trees; Babur maintained it after its initial creation, sending instructions about new plantings of trees, sweet herbs, and scented flowers, and reminiscing that this garden “had got the name of Belvedere, because it faces the ford and gives a first-rate view.”30

In the context of this chapter, Babur’s most significant early garden is the Bagh-i Wafa or Garden of Fidelity (fig. 5.8), which he constructed around 1508–9 on a rise to the south of the old Adianapur fortress near Kabul.31 Using an approach that we will see again in his later gardens at Agra, Babur chose to locate the Garden of Fidelity on the opposite bank to the existing fortress, thus symbolizing his suspicion of cities and his wish to create his new dynasty closer to nature, in the gardens where he felt most at ease. He writes of this garden, “It overlooks the river, which flows between the fortress and the garden. . . . The garden lies high, has running water close at hand, and a mild winter climate. . . . In the southwest part of it there is a reservoir ten by ten, round which are orange-trees and a few pomegranates, the whole encircled by a trefoil meadow. This is the best part of the garden, a most beautiful sight when the oranges take color. Truly that garden is admirably situated!”32

These glimpses from Babur’s autobiography give us a good sense of the context and situation of the gardens he admired, and those he created, before he conquered northern India and began laying out gardens in the very different landscapes of Hindustan. His preference was for high, terraced, symmetrical gardens, offering fine views of rivers and meadows, open to the surrounding landscape and allowing him to enjoy and enhance natural features such as springs and vistas. We can sense a joy and awe about natural landscapes, a pleasure in their beauty, variety, and plenty, a wish to be part of them and to use them to illustrate his power over the territory. The locations of Babur’s gardens were carefully chosen, enabling him to benefit from both flowing water and the climate, with a stress on what he called good air. Lushly planted with flowers and fruit trees and furnished with carpets and pavilions, these gardens were at the center of court life. In some ways they seem very different from the European Renaissance gardens discussed above, with the gardens not subservient to an adjacent building, but playing a major role in their own right. Indeed, some had no link to a building at all, being transient and flexible garden encampments, laid out where the emperor wanted to set up a temporary base in his travels, and easily adapted to meet new needs.33 Yet there are also strong similarities between these Mughal and Renaissance gardens, with the chosen sites often in high locations, away from the city, for both the security and vistas such sites offered, and exhibiting a new delight in and wish to engage with natural landscapes. Through the use of pavilions, galleries, and tents, gardens in both regions provided sheltered places that
blurred the distinction between indoors and outside and allowed people to enjoy fresh air and fine prospects without being fully exposed to the elements. Early sixteenth-century gardens were also used by both the popes and cardinals of Europe and the rulers of Central Asia as new ways to display the power and control of their creators: they were deliberately located to be visible from afar and open enough to offer impressive views over much of the surrounding countryside.

Babur as a Creator of Early Mughal Indian Gardens

Babur conquered the territory he called Hindustan (the area of modern-day Pakistan and India that lies east and south of the Indus River) at the battle of Panipat in 1526, defeating Sultan Ibrahim Lodhi of Delhi. Given his practice of tailoring his gardens to suit the features and climate of their surrounding landscapes, the emperor quickly adapted his designs to the hot, dry plains of northern India. The difference between these new landscapes and the Central Asian mountains familiar to Babur and his army had initially struck him when, in January 1505, he rode for the first time southeast out of Kabul and toward the Hindustan border and exclaimed, “another world came into view—other grasses, other trees, other animals, other birds, and other manners and customs of clan and horde. We were amazed, and truly there was ground for amazement.”

This early assessment of Hindustan as essentially different both environmentally and culturally from the lands he knew was confirmed by his later experiences of the country. After conquering the area, Babur famously listed the many things he disliked about Hindustan, labeling it “a country of few charms” and complaining that there was no custom of paying or receiving visits, no flowing water in the gardens, and that the houses had “no charm, air, regularity or symmetry.” What hills did exist were mainly “low, rough, rocky and jungly,” and most places were on “the dead level plain.” He did, however, concede that during the rainy season the air was “remarkably fine, not to be surpassed for healthiness and charm” and that Hindustan had “unnumbered and endless workmen of every kind” with important artisanal skills, such as stone cutting, passed on from father to son. Babur’s assessment meant that he did not try simply to import existing ideas and influences into the gardens he would create in Hindustan but, as we shall see, clearly adapted his designs to suit the wider landscape context and to make the most of the country’s artisanal skills.

Babur created many gardens in India, from a formal garden linked to a mosque at the site of his victory in Panipat to a personal retreat near Dholpur, about 170 miles south of Delhi, which was known as the Bagh-i Nilufar, or Lotus Garden. Its site was confirmed and its remains documented by historian Elizabeth Moynihan in the 1980s. The Baburnama describes the dramatic nature of this garden, which was hewn from a natural outcrop of rock, forming a physical bond between natural landscape and designed garden. It was laid out from 1527 as part of a palace complex built on a rock platform and included a mosque, a tank or reservoir cut out of the solid rock, and a new well dug among mangoes and plum trees. The garden itself was next to a lake fed by the monsoon rains and featured a hot bath, a seat, and a four-pillared platform cut out of the same red rock. The central terrace featured a series of lotus-shaped pools cut from the rock, which gave the garden its name. We can see at the Lotus Garden how Babur, always seeking to make the best of the local climate, looked for ways to use the surrounding landscape to minimize the heat, winds, and dust that oppressed him in Hindustan. Given the flatness of the land, he could not benefit from mountain
breezes, but his private suite in the palace was open only to the cool north, allowing fresh air to circulate but protecting the quarters from the harsh Indian sun; it offered views northwards across the lotus blossom pool and the garden to the army encampment and wider landscape beyond. The unusual layout of the Lotus Palace site, with its complex pattern of buildings, terraces, and open spaces designed to fit within the rocky topography, became a model much used by later Mughal emperors, from Akbar’s Fatehpur Sikri, itself on a site first developed by Babur, to the seventeenth-century city of Shahjehanabad in Delhi. The art and architectural historian Ebba Koch has pointed out the similarity between the Lotus Palace’s asymmetrical design, with its unexpected contrasts and tensions between the various elements, and the Mannerist style in Renaissance Italy, of which the Villa Madama can be seen as an early example.

A further example of Babur’s complex relationship with cities and landscapes can be seen in the gardens he created along the Yamuna riverfront at Agra, even though the location, around the old Hindu fort that had become the second capital of the Lodhi dynasty, did not at first seem propitious. Instead of the mountain slopes and plentiful water supply that Babur was accustomed to, the emperor found the hot plains around Delhi and Agra lacking the fresh, fast-flowing streams he considered necessary for garden-making. On first inspection, he thought the existing grounds around Agra “so bad and unattractive that we traversed them with a hundred disgusts and repulsions. So ugly and displeasing were they, that the idea of making a Char-bagh in them passed away from my mind, but needs must!”

No doubt some of this scorn for the existing plots was Babur’s attempt to demonstrate the intrinsic superiority of his own Timurid culture over the inferior gardens of the land he had just conquered. None of his Agra gardens survive today, but from the Baburnama we know they included the Bagh-i Hasht Behesht (Garden of Eight Paradises), opposite the site where the Taj Mahal now stands, and the Bagh-i Zar Afshan (Gold-Scattering Garden), farther north along the river, where Babur’s body may have been temporarily buried on his death in 1530, before being taken to the dramatic terraced garden in Kabul, now known as the Bagh-i Babur, which he had chosen for his imperial tomb. Choosing sites close to the Yamuna River for his Agra gardens meant that Babur had ready access to the water essential to his designs, and he established a system of wells and ox-powered waterwheels to ensure supply. The location of his gardens also allowed Babur to make the most of the cooling breezes coming off the water, to mitigate Agra’s heat and dust, and to create commanding vistas for visitors to the garden along and across the Yamuna and impressive views of the gardens for those approaching from the river. At the Garden of Eight Paradises, as well as an octagonal tank or reservoir (from which the garden took its name), a hot bath, and flower borders, Babur constructed a raised, open platform, which probably served as an audience chamber and viewing spot, a more permanent version of the pavilions and tents he used to receive visitors when he was traveling.

Although he created an elaborate double baoli (step well) within the old fort, most of Babur’s gardens at Agra were created outside the city walls (see fig. 5.9, which probably shows Babur receiving foreign envoys in a garden at Agra, with the fort in the background). Indeed, as happened at Adianapur, most gardens were laid out on the opposite bank of the river from the fort, making a palpable declaration that this was a new dynasty and that its emperor saw cities as essentially hostile and untrustworthy and wished to conduct his business among the beauty and security of his new gardens. As well as creating his own gardens,
Babur gave plots of land along the riverbank to his closest allies, who laid out similarly ordered, well-watered gardens, allowing the emperor to note proudly how the local population called these highly visible new developments along the riverbank “Kabul,” in recognition of the distinctive nature of the designs. The gardens were thus a deliberate, visible sign of the new empire being established.

In contemporaneous accounts, we also see how Babur and his court interacted with the landscape surrounding his new gardens at Agra. Their location directly on the riverbank supported a sophisticated social hierarchy: the emperor could retreat by boat or raft to a garden on an island or inaccessible part of the other riverbank, inviting trusted family and commanders to join him but leaving everyone else on the opposite bank, needing permission to cross the river (fig. 5.10). It is an echo of the use of the secret garden at Gaillon as a private retreat for a powerful cardinal and his most important guests. In one instance, Babur retired with his immediate family to the Gold-Scattering Garden and was reported by his daughter Gul-badan to have said he wished to pass the throne to his son and spend his days peacefully and privately in the garden he had created: “My heart is bowed down by ruling and reigning; I will retire to this garden. As for attendance, Tahir the ewer-bearer will amply suffice. I will make over the kingdom to Humayun.”

From this analysis it is possible to see how the context of early Mughal Indian gardens under the first emperor Babur remained inspired by the Persian and Timurid models he had admired around Samarkand and Herat, with their plenteous water, ordered layout, lush planting, and fine prospects. Yet he clearly adapted them to suit and incorporate the very different climate and topography of northern India, with its dry, flat plains: planning the orientation and layout of his sites to avoid the worst of the heat and dust,
and making use of wide rivers both for reliable supplies of water and for the cooling breezes they offered. The gardens stand in opposition to the enclosed citadels of his predecessors, and instead engage with the surrounding landscape, as demonstrations of the emperor’s wish to enhance and enjoy natural features, to create private retreats, and visibly to impose his Timurid identity on the land and its inhabitants.

The idea of riverside gardens, with their exploitation of water and cool air, spread quickly from Agra to Lahore and Delhi, with the Jesuit Father Monserrate describing Delhi in the early 1580s as full of “lovely parks and many residential districts on both sides of the Jomanis [Yamuna] ... filled with a rich profusion of fruit and flowers.” After Babur, however, subsequent emperors sought to tighten their grip on Mughal India through urban building programs, and the incorporation of the wider landscape became a less important feature of Mughal gardens. They began to be sited again within walls and citadels, as can be seen at the new city of Din Panah, created by Babur’s son Humayun, who was buried in the first of the great, enclosed Mughal garden tombs. Akbar, Humayun’s son, confirmed this emerging new relationship between his empire’s urban strongholds, gardens, and the wider landscape, rebuilding the earlier forts at Agra and Lahore and laying out gardens inside these citadels, or immediately adjacent to them.

The European Renaissance and early Mughal Indian gardens described in this chapter share a number of similar approaches in the way they engaged with their wider surroundings. First, they were frequently placed in locations away from the cities and fortifications that had been the previous centers of power. The Villa Madama on its hill outside Rome and Babur’s gardens on the opposite riverbank to the fort at Agra both proclaim the presence of their owners in novel and unexpected ways. Unsurprisingly, the gardens in both regions made deliberate use of their elevated position, or of added features such as towers and raised platforms, to offer traditional defensive capabilities for their powerful owners, who were under constant threat of physical attack or political challenge. Yet we can also see how the high ground of the gardens at Gaillon and Villa Madama, and the elevated site or raised features of Babur’s
gardens (such as the terrace at Bagh-i Hasht-Behesht), introduced a strong sense of display into these sites, making them visible to others who were outside the gardens and offering impressive vistas from inside: lining up the view of the Milvian Bridge, for instance, from Villa Madama, or the sight of the ford for Babur at Khwaja Basta. Given the importance of reliable water sources for sixteenth-century dwellings, it is perhaps unsurprising that views from these gardens frequently featured rivers, from the Seine valley at Gaillon, and the Tiber flowing through Rome for Villa Madama, to the Yamuna for Babur at Agra.

As well as the choice of location, the design of the dwellings and the gardens themselves also shared a number of similarities. Features were introduced to obscure the dividing line between interiors and exteriors: we see this in the open gallery next to the cardinal’s chambers in Gaillon, the frescoed loggia at Villa Madama with its large arches that opened on to the terrace, and, in a different way but with the same intent, in Babur’s temporary pavilions and tents in his gardens at Dholpur and Agra. Within the gardens, natural features from the wider landscape were blended into the designs, most strikingly perhaps in the creation of the Bagh-i Nilufar at Dholpur from its red rock platform, but also in the way that the gardens of Villa Madama were to be carved into great terraces that followed the contours of the hillside. Parallels between the two sets of gardens exist as well in the focus on making use of the surroundings to create sites for specific pleasurable activities. These include the idea of hidden retreats or secret places, separate from the main garden, such as the pavilion at Gaillon, which was reached after a dramatic scenic walk from the château, and the Bagh-i Zar Afshan, on the other side of the Yamuna River, which Babur used as a retreat when he tired of kingship. At all these gardens, a greater engagement with the wider surroundings also led to careful consideration of prevailing weather conditions, so that performances, ceremonies, parties, and more solitary reflection could be located to make the most of pleasant warmth in winter and shade and cooling breezes in summer, whether for meals on the lower terrace at Villa Madama or for Babur’s private quarters at Dholpur.

Conclusion

Despite the many dissimilarities between early sixteenth-century gardens in Europe and Mughal India, it is clear from this brief analysis that similar cultural and social shifts led to a new relationship between dwelling, garden, wider landscape, and city in both regions. Places that previously would have been walled or otherwise enclosed against the wildness of nature and the risk of attack became more open to and engaged with their surroundings, while gardens in both regions blurred the distinction between indoors and outside, offering views and exposure to fresh air combined with some degree of shelter and intimacy. What is most striking perhaps is the similarity of reasons for the incorporation of the wider landscape into gardens in these two regions. As noted above, there is a direct parallel between Alberti’s advice to Italians to seek “all the Pleasures and Conveniences of Air, Sun and fine Prospects” and Babur’s admiration of a Timurid garden for its “beauty, and air, and view.” The wealthy and powerful in Europe and Central Asia were thus seeking similarly to make the most of the climate, locating and orientating their buildings and gardens to create places where they could retreat, entertain, and impress throughout the seasons. While Eastern emperors and Western cardinals still sought to create places that were secure and easily defensible from attack, their concerns were now equally to use their creations as physical
demonstrations of their power and wealth, with dramatic locations visible to everyone from afar and impressive views over the lands they controlled or owned. In both regions, the new designs were in fact a deliberate reference to earlier gardens and styles: for Renaissance Europeans, to the classical forms of imperial Rome, and for Babur, an expression of cultural identity and power through the imposition of Timurid styles on the new world he now controlled.

1. The term “Mughal India” is frequently used but difficult to define with any degree of confidence or consensus. The Mughal Empire is generally seen as beginning in 1526, when its first emperor, Babur, conquered the Sultanate cities of Delhi and Agra, creating an empire that covered parts of modern-day Afghanistan and Pakistan and much of northern India. Succeeding Mughal emperors conquered more territories, and, at its peak under Aurangzeb around 1707, the empire extended from the southernmost areas of what is now Tajikistan, across much of Pakistan and Afghanistan, almost all of India, and into parts of modern-day Bangladesh. The empire subsequently shrank to little more than Delhi, and finally ended in 1858 when the British deposed and exiled the last Mughal emperor; the remnants of his empire were subsumed into the British Raj.

For the purposes of this chapter, I have used “early Mughal India” to mean the areas of modern-day Pakistan and India that Babur ruled in the last four years of his life, which correlate with the culturally and topographically distinct areas of land south and east of the Indus River that he called Hindustan in his autobiography.


8. The elements of this garden seem to have had many names in their short history: as well as la maison blanche, there are also references to l’île heureuse (the happy island), le parc du Lydieu, le pavillon de la Ligue, and le Parnasse de Gaillon. A brief analysis of the history can be found in Christopher Thacker, *History of Gardens* (Berkeley: University of California Press, 1985), 121, 125.


10. See Lucienne Thys-Şenocak, “The Yeni Valide Mosque Complex of Eminönü, Istanbul (1597–1665): Gender and Vision in Ottoman Architecture,” in *Women, Patronage, and Self-Representation in Islamic Societies*, ed. D. Fairchild Ruggles (New York: SUNY Press, 2000), 69–90, for a discussion of the importance of views and viewing in Ottoman kiosks and related buildings. The Ottoman Empire at this time was spreading its military power and cultural influence across much of the eastern Mediterranean, and it is not entirely fanciful to imagine that the Gaillon pavilion’s redesign in the 1560s was influenced in part by travelers’ tales of the appearance and use of Ottoman kiosks.

11. The extant sixteenth-century plans of the villa are famously fragmentary and confusing, and much scholarship exists on who drew which of them, in what order they were produced, and how they relate to the topography of the site. For more information, see David R. Coffin, “The Plans of the Villa Madama,” *Art Bulletin* 49, no. 2 (1967): 111–22; and, for a particular interpretation, Mario Bafille, *Il giardino di Villa Madama* (Rome: Istituto Poligrafico dello Stato, 1942).

15. Ibid., 118–20.
20. See, for instance, ibid., 1:72, 145, 156.
23. The outdoor displays and festivities were witnessed by European visitors, most notably in 1404 by the Spanish ambassador Clavijo, who described with admiration the many gardens he saw around Samarkand: Ruy González de Clavijo, Narrative of the Embassy of Ruy Gonzalez de Clavijo to the Court of Timour at Samarcand, a.d. 1403–6, trans. Clements R. Markham (London: Hakluyt Society, 1859).
26. See, for instance, the creation of a stone platform on a height for an advance camp, in ibid., 1:375, and the counting of camels from high ground described in the same volume at 391.
27. Wescoat, Gardens Versus Citadels, 353.
28. Babur, Babur-nama, 1:152–53. The illustrated Baburnama shows the emperor making a garden at this spot, but there is no evidence in the text to support the image.
In 1598, Shah ʿAbbas I (1571–1629), the most powerful of the Safavid monarchs in Persia (Iran), moved his seat from Qazvin to Isfahan. He did this in order to create a safe haven for the Safavid Empire after periods of instability and frequent wars with the Ottomans in the west and Uzbeks in the east. He selected Isfahan because of its strategic, climatic, and natural advantages, as well as its rich cultural heritage. Shah ʿAbbas brought intellectuals and artisans from other areas of his empire to convert Isfahan into an international center for science, trade, art, and architecture. Safavid planners reorganized the plan of Isfahan to create a modern city (fig. 6.1), and over the course of about three decades Isfahan became one of the largest and most prosperous cities of the world in the seventeenth century, as witnessed by European travelers. This new master plan was based on a decrease in the building density (as one moved away from the medieval center) and the laying out of extensive gardens both inside and outside the city. Isfahan, also called “Half of the World,” included a new city center, a grand bazaar, new residential quarters with their local bazaars, and a famous urban axis called Chaharbagh Street, along which several gardens (including pavilions) were located. This capital city, with its palaces, bazaars, and gardens, was widely visited by European, especially Italian, travelers and political envoys (such as the Shirley brothers), who left detailed accounts.

This new approach to urban design in Isfahan suggests surprising similarities with concurrent developments in Renaissance garden design, especially in Italy. Using Chaharbagh Street as the main focus, I will attempt to explain how gardens became part of the city’s fabric, how their social function changed from private to public, and in what ways the gardens of Isfahan were integrated into the urban layout and setting. Using both documentary and formal analysis, I aim to explain the concurrent nature of these changes in both regions by drawing attention to the...
6.1 Chaharbagh Street in Isfahan.
changing relationship between the city and the garden—without, however, trying to prove any direct influence between the gardens of Renaissance Italy and Chaharbagh Street in Isfahan.

Regional Precedents for Urban Gardens

Shah ʿAbbas’s biographer, Iskandar Bayk, known as Munshi (secretary), wrote that the shah intended to make Isfahan the representation of paradise on earth.5 This desire was realized by creating monumental buildings and gardens as urban nodes in different parts of the city. The vision of this modern Isfahan—including its new urban square, Naqsh-i Jahan (fig. 6.2), an extensive bazaar, and Chaharbagh Street—enabled a new mode of interaction between the king and his subjects, one based on daily observation of ordinary people (an idea embedded in the design of the Ali Qapu Palace, from which Shah ʿAbbas could observe his subjects and their activities from close proximity). The development of Isfahan in the Safavid era was the continuation of Ilkhanid, Timurid, and early Safavid achievements in urban

6.2 Pascal Coste, drawing of Naqsh-e Jahan Square, 1839.
and architectural design. Earlier history and travel accounts refer to a comparable approach by laying out gardens as the core of cities. Three specific cases that need to be mentioned here are Nasriyya in the northwest of modern-day Iran, Herat in Afghanistan, and Qazvin in central Iran.

The Hasht Behesht palace complex, built for Uzun Hasan, ruler of the White Sheep Turkmens (1466–78 C.E.), was located in Hasan’s new quarter, Nasriyya, on the immediate outskirts of his capital of Tabriz. Hasan encouraged people to use Nasriyya by constructing public areas such as a market, madrasa, mosque, and hospital, and erected a private palace garden for himself. The significance of the garden complex in this quarter is that it was designed not as an isolated realm but as the focal point for urban development. An anonymous Venetian merchant who visited this complex in the fifteenth century wrote that this garden had three entrances, one each in the south, the north, and the east. Beyond the main gateway, there was a fine paved road that led to the royal palace. The eastern door was on an immense piazza (meydan) and led into the garden. According to these descriptions, this royal quarter included three main components: a public square (meydan), a paved road, and palace gardens.

Two other contemporaneous cities in this region were Samarkand and Herat, both of which were great examples of integrating gardens into the urban fabric. The Spanish ambassador to Timur’s court, Ruy González de Clavijo, frequently referred to the abundance of gardens inside and outside Samarkand during the reign of Timur. The second-largest Timurid city, Herat, was also renowned for its pleasure gardens as well as its sites of agricultural production. One of the few garden treatises in the Islamic world was written by Qasim b. Yusuf Abu Nasr Haravi, a resident of Herat in the Timurid age. Haravi’s book (finished in 1515) is a comprehensive horticultural manual and an encyclopedia of herbs, plants, and garden produce (including various fruits and vegetables, and even the methods of processing them as food), which also includes instructions on chaharbagh design (fig. 6.3). Knowing that Shah ʿAbbas was born in Herat (1571) and lived there until he ascended the Safavid throne, it is reasonable to assume that he was strongly impressed and influenced by the garden culture in this city. Sixteenth-century Herat was a remarkable example of the integration of landscape design and architecture, which may well have had an impact on Shah ʿAbbas’s outlook and his understanding of urbanism, gradually shaping his vision for his new capital, Isfahan.

The third case that indicates the continuity of the concept of urban garden is Shah Tahmasp’s royal garden in Qazvin. This garden was described by ʿAbdi Beyk Navidi, the poet in the court of Shah Tahmasp (Shah ʿAbbas’s father). According to ʿAbdi Beyk, this garden was commissioned by Shah Tahmasp himself. The four books of poems, which describe the garden in Jafar Abad outside of the city of Qazvin, provide extensive information on economic aspects of gardens, the typology of fruits and flowers, and their use in Safavid Persia. Navidi discusses the presence of a royal building (Sarai-i Shahi) in the garden and mentions that the architect had a meeting with Shah Tahmasp after the construction to celebrate the building in 1558. He calls this pavilion (qasr) a place to receive God’s mercy and kindness (manzelgah-i rahmat-i elahi).

Mahvash Alemi’s studies on Navidi’s texts demonstrate that the garden city of Qazvin developed around a public street (khiyaban) that led to the Ali Qapu gate. The three public gardens of Shah Tahmasp’s garden city included this street (khiyaban) and two public squares (meydans). These cases from Ilkhanid Nasriyya, Timurid Herat, and early Safavid Qazvin suggest that Shah ʿAbbas inherited a courtly garden tradition that he then carried on in his capital city.
6.3 Reconstruction of Haravi's garden.
Gardens and the City

Italian Renaissance gardens and villas originated as centers of productive estates and also as places of recreation used by wealthy citizens. In contrast to medieval cloister gardens, Renaissance villas were more open to their immediate surroundings, establishing a more direct link with nature. The fifteenth-century Medici Villa at Fiesole, for example, was conceived in close relationship with the adjacent church of San Girolamo, emphasizing the sacred meaning of the surrounding landscape (dotted with little sanctuaries and hermits’ retreats), while its hilltop location offered spectacular views of Florence and the Arno valley (fig. 6.4). Physically embedded in the hillside, the villa and garden were conceived as an integral unit, where the terrace expanding outward felt more like an outdoor room—an extension of the property rather than a separate entity. This unification of the design with its surrounding landscape was intended to promote a harmonious relationship with nature. Yet from the sixteenth century, many Renaissance gardens were increasingly integrated into the urban fabric. If the early sixteenth-century Villa Madama still rose quite independently above Rome, with its panoramic view over the city conveying the prestige of its owner, Pope Clement VII, the later Villa Lante at Bagnaia and the Palazzo Farnese at Caprarola were designed on the same axis as the settlements that lay below them (fig. 6.5). This continuation of garden paths into urban thoroughfares announced a new, more direct mode of relationship between the garden and the city, achieved through the use
of geometry and perspective that became the foundation of Renaissance art and architecture. An important factor in this context was an increasing use of urban gardens, as opposed to remote rural villas, for recreation, not only by their owners but also their guests, foreign visitors, and members of the general public—as, paradoxically, was the case with the Boboli Gardens in Florence, conceived by their original owner, Eleonora di Toledo, the wife of Cosimo I de’ Medici (r. 1537–74), in isolation from the city and opening toward the countryside (fig. 6.6).21

In Safavid Isfahan, a vast and advanced irrigation network facilitated the design and construction of gardens,
which, however, were the core of the urban master plan rather than an afterthought. The new main axis within the city, Chaharbagh Street, which from the outset was conceived as a public promenade, connected two sides of the Zayanderud River (fig. 6.7). Many foreign travelers who visited Persia beginning in the seventeenth century—among them John Fryer (1677), Jean Chardin (1671–80), Jean-Baptiste Tavernier (1632), Sir Thomas Herbert (1628), Engelbert Kaempfer (1684–85), and, later, Robert Blair Munro Binning (1847–49)—left detailed accounts of this new urban thoroughfare.24 In his descriptions of Isfahan, the French traveler Jean-Baptiste Tavernier referred to the Emarat-i Dargah kiosk as the end point of Chaharbagh Street, mentioning a water channel diverted from the Zayanderud River that ran through this building.25 The two-storied structure had narrow corridors, four halls, and several windows with wooden openings. Tavernier also mentions that occasionally access was restricted to the shah and his family, but in general the street was open to the public as a traffic artery as well as for leisure and recreation, at which time it became a promenade and connector between the kiosk and Allah Verdi Khan Bridge. The new city was intended to be perceived as the city of gardens by both residents and visitors. It certainly made this impression on some foreigners, including Jean Chardin,26 who visited it in 1664: “Isfahan with its suburbs was the largest city in the world, resembling a forest from every direction; approaching the town, only the minarets and domes came to the eye.”27

Chaharbagh Street stretched between two major gardens: the Dargah pavilion-garden on the northern side and Hezar Jarib Garden (Thousand Acres) at the southern end of the street. Likewise, the Hezar Jarib Garden of Shah ʿAbbas I (r. 1588–1629) remained functionally and formally integrated into the urban landscape. Shah ʿAbbas I’s Abbasabad, or Hezar Jarib Garden palace, was built near the foot of Sofreh Mountain to mark the end of Chaharbagh Street (fig. 6.8). This principal artery served to connect the areas invested with new urban functions clustered around
6.8 The Hezar Jarib Garden in Pascal Coste's drawing of a general map of Isfahan, 1840.
the meydan to the residential quarters and satellite centers of Isfahan, to provide the women of the royal heram with a public space, and to constitute a place of public leisure in the city.28 Upon Shah 'Abbas's order, women were allowed to enjoy Chaharbagh Street and the adjacent royal gardens on certain days. In addition to the Abbasabad garden in the suburbs, the king owned another Abbasabad garden within the city limits. The historian Sussan Babaie argues that the existence of these two palaces in the urban topography of Isfahan represented two important latitudinal spheres of authority and power that brought together politics, commerce, and religion.29

Safavid garden pavilions along Chaharbagh Street also received much comment from foreign travelers. For instance, John Fryer referred to houses that were connected to orchards and gardens along Chaharbagh Street, most of which belonged to the king and his courtiers.30 His text proves the existence of several garden pavilions, which he calls "summer-houses," on two sides of Chaharbagh Street which are no longer extant. One of these summer houses, located in a fourfold garden, was Hasht Behesht (fig. 6.9 and 6.10), described by Fryer as a "sweet summer-house" crossed by two channels.31 A much later traveler, Robert Binning (1814–1891), who visited Isfahan in the nineteenth century, also described Hasht Behesht pavilion.32 He heard that it was one of the seven palaces (Haft Dest) that formerly stood in different gardens beside each other on Chaharbagh Street: "this suite [Hasht Behesht] comprises a palace, two stories high, containing a vast number of apartments, none very large or handsome, built round a
court laid out in garden beds . . . one of the chambers in the lower story, ornamented with a Tabriz marble (*hizara*) daubed with flowers, and a cistern of marble in the floor. binning also described another safavid pavilion in the west of chaharbagh street that resembled chehel sotun and had an open façade with a flat roof supported by twelve pillars inlaid with mirrors, and ornamented chambers within. this palace consisted of an open polygonal hall below and some rooms above, much tattered and tarnished by the time he saw it. these descriptions of chaharbagh street and its gardens prove shah ʿabbas’s success in presenting this urban promenade and the adjacent areas, with their unique combination of natural and manmade elements, as a showcase for the achievements and accomplishments of his reign.

Appreciation for History

The Renaissance—literally “rebirth”—was a conscious attempt at reviving the knowledge and art of antiquity. This reverence for the distant past was reflected not only in the use of ancient architectural elements and features and the revival of pagan mythological subjects and themes, but also in theoretical thinking. The Renaissance conception of villa culture developed under the influence of the fifteenth-century humanist writings of Leon Battisti Alberti, whose *De re aedificatoria* (*Ten Books on Architecture*), although incorporating the knowledge of earlier agricultural treatises, became a seminal work in the context of Italian garden design. While adhering to the architectural principles of Vitruvius, Alberti extensively quoted two other ancient Roman authors, Pliny the Elder and Pliny the Younger, to convey what a garden should look like and how it should be used. Alberti’s fascination with ancient Rome encouraged subsequent generations of architects to use archaeological and textual evidence in the creation of their antiquity-inspired gardens in sixteenth-century Florence and Rome.

This interest in the distant past and appreciation of historical texts had been characteristic of safavid culture since the dynasty was founded by Shah Isma’il, who determined to unite Persia after centuries of political fragmentation. Shah Isma’il used Persian elements to promote his nationalist agenda and to present his new Shi‘ia government as the successor of ancient Persian empires—something
that helped in his opposition to both external and internal enemies. Narrating pieces from the *Shahnama* (Epic of the kings) in his military expeditions became a way to encourage his soldiers and people during wars with the Ottomans and Uzbeks, and Safavid interest in the *Shahnama* is rooted in this ideology.37

How did this appropriation of the past to pursue dynastic and imperial goals affect Safavid garden design in Isfahan? Shah ʿAbbas’s objective was to strengthen the country’s recently forged identity by insisting on the empire’s shared culture, which had been weakened by the long absence of a powerful central government. In the design of such Safavid palaces in Isfahan as Ali Qapu (fig. 6.11), a columned hall (*iwan*) was designed to connect the palace to the garden and public spaces. Both Mahvash Alemi and Wolfram Kleiss have described similarities between the plan of these Safavid palaces and the ancient Achaemenid palace of Apanada in Persepolis.38 Historically, it is difficult to prove any direct connection, especially since our current systematic knowledge of Achaemenid history and architecture originates with early twentieth-century excavations of these ancient sites. However, it is important to emphasize that the Achaemenid palaces in Persepolis and Pasargadae were occasionally visited, described, and even sketched by European and local travelers. Their fragmented acquaintance with pre-Islamic Persian architecture may justify the revival of ancient architectural elements and spaces such as the *talar*, a lofty porch erected on wooden columns. It should be noted that this revival of the past in Safavid gardens suggests both self-representational and political agendas, while for Alberti the interest in Roman antiquity was only a means of self-representation.
Hydraulic Technology and Water

One of the main features that distinguished Renaissance gardens from their medieval predecessors concerned their advanced and elaborate waterworks. This network of fountains and water channels was also strongly tied to specific narrative, mythological, or allegorical themes that it aimed to express. Water that was featured in Renaissance gardens was often channeled for public use, marking another important connection between the garden and the city. An often cited example is the Villa Lante at Bagnaia (c. 1566), where water descending along the slope of a hill to a large fountain in the parterre was subsequently conducted to a number of public fountains in the adjacent village (fig. 6.12). In 1532, a few decades before Cardinal Gambara commissioned Vignola to design the formal gardens of the villa, Niccolò Ridolfi, the protégé of the Medici pope Leo X, started work on an aqueduct that brought water from the Votamare Spring on Monte San Valentino to the conservone (water-distribution tank) in the hunting park (bosco). Later, Gambara hired a specialist in hydraulics, Tommaso Chiruchi, from Siena to design the fountains and the water chain (catena d’acqua).39

The formal gardens of the Villa Lante are laid out as a rectangular plot, which descends down the hillside in terraces. At the southern end, the top of the hill is a heavily shaded rustic grotto—the first of the seven fountains within the garden. These fountains, which include the Fountain of
the Giants, featuring two large peperino stone statues representing the Tiber and Arno Rivers, are placed along the central axis, which ends in the parterre with shallow geometrical pools. As a result, water is the dominant element in the design of the Villa Lante. Its seven fountains not only help unite the layout but, through their decorative programs, also convey the meaning of the garden as a whole.

The same approach is evident in the Palazzo Farnese at Caprarola (c. 1573), where the pentagonal villa raised on high foundations and the extensive gardens behind it—divided into upper and lower parts—dominate the neighboring town. Here, water is also an essential element in the upper garden’s layout, with a fountain at the base of the water chain greeting visitors as they arrive at the entrance to the casino (summer house). Above is placed another fountain, flanked by dual staircases that echo the entranceway to the villa, with statues similar to those in the lower gardens lining the perimeter of the stairs and parterres (fig. 6.13).

The Safavid master plan for Isfahan was proposed more than forty years after the creation of these Italian villas. In terms of design, its fountains and pools were never intended to be as delicate as those of Italy, nor did they include statues or decorative programs. Nevertheless, it is known that they were considered integral elements of the site plan, and, even more importantly, they extended into
the public space of the city. The Safavid royal palace, Chehel Sotun (Forty Columns), which was commissioned by Shah ʿAbbas II (r. 1642–66) in the mid-seventeenth century, had a portico with twenty columns (fig. 6.14).44 Shah ʿAbbas II added a front talar (hall) to the other palace in Naqsh-i Jahan Square, Ali Qapu, which included a fountain on the third floor, an unprecedented element in Persian architecture that illustrates the impact of hydraulic technology on Safavid architecture.

The presence of water in Safavid palaces and gardens was the consequence of a radical rethinking of the use of water as a tool of urban development. In pre-Safavid cities in Persia, the qanat (underground water channel) defined the footprint of urban quarters (mahalla). Urban linkages such as streets and avenues replicated the complex network of qanats, which were the main source of irrigation in Iranian cities. Isfahan followed the same patterns of urban growth until the mid-sixteenth century, when a tunnel was dug near the city of Chelgerd to bring the water of the Kuhrang River to Zayenderud. This was done in order to revitalize the irrigation system in Isfahan and restore its surrounding villages and towns as an agricultural center.45 Shah ʿAbbas’s master plan for Isfahan, attributed to his scholarly advisor Sheykh Baha’i,46 was to incorporate the agricultural properties and orchards in the suburbs of the city (formerly outside the city walls) in order to develop the
Seyed Reza Khan map of Isfahan, 1920s, with overlay showing water channels branching from the river to support the city.
city south. Urbanizing the countryside was made possible by laying a grid of orderly and unifying structures and gardens leading toward the river. A significant part of this urbanization project was to reorganize the water-distribution system. This new plan included southern areas that were already on the outskirts of the city, as well as the river as the main source of water. In contrast to the pre-Safavid cities based on the *qanat* pattern, the Safavid plan was based on three networks of water channels (*madis*) distributed throughout the city. These *madis* supplied water to the urban quarters, thus bringing life to residential neighborhoods and public spaces, while also facilitating the construction of gardens in different areas of the city (fig. 6.15).

Shah ʿAbbas, as the main patron of hydraulic projects in Isfahan, regulated and managed the water supply for urban or agricultural uses in a way that enabled the extraordinary growth of the city and its population while asserting his image of power and authority. Gardens and buildings had the right to receive water from a *madi*. Most of the *madi* water belonged to the king, and the money earned from its sale was a source of revenue for the Safavid court. In some cases, after a madrasa was built and consecrated, selling water became part of its revenues. In contrast to water in government-owned public channels, water diverted from the river, which flowed in manmade *madis* and channels, was part of private property and owners were taxed, making monthly and annual payments for water based on the size of their lands. According to Chardin, the owners had to pay twenty deniers for each *jerib* (a unit less than an acre) each year in order to buy the river or spring water. Tavernier also complained about the high cost of water, finding this unfair to the farmers. The amount of water that entered each garden, and the length of time that it was used there, were measured: this was achieved by placing stones called *lats* (dividers) in the course of *madis* or streams in order to specify the amount of water used. The period of water consumption was measured by a *pangan* (cup) that worked as a water watch.

What is especially interesting about this aboveground irrigation system, the *madi*, is that it was extended to the design of public buildings. Not only did it provide water for public use in mosques and madrasas, but the *madi* network was physically incorporated into their design. For instance, in the Chaharbagh madrasa, the *madi* that passed through the building was designed as an axial water channel (fig. 6.16). By passing through these buildings, water changed their nature from static to active and made them interact with their natural context, a rare phenomenon in Iranian architecture. A more developed variation on this approach is manifest in Fin Garden in Kashan near Isfahan, in which two water channels run through a building located at the center of the garden (fig. 6.17). Dominated by water, the whole pavilion thus becomes transformed into a transparent and light structure. In summary, the new Safavid irrigation network, facilitating the use of water in public buildings and spaces, was an important innovation and revolution in Iranian urbanism, which seems to parallel the public distribution of water featured in the Renaissance cities of Italy.

Spatial Qualities: Perspective and Views

One of the main contributions of Renaissance artists was the discovery of the technique of perspective. The geometrical method of depicting perspective was demonstrated in 1413 by Filippo Brunelleschi, a well-known Florentine architect and engineer; soon after this experiment, artists in

6.17 Fin Garden in Kashan, Iran.
Florence and the rest of Italy increasingly started to use the perspective method in their paintings (fig. 6.18). It is often said that Al-Hazen’s *Book of Optics* (translated into Italian in the fourteenth century) influenced the Renaissance artist Lorenzo Ghiberti, who used this book and quoted from it extensively while framing his account of art and its aesthetic imperatives. A number of Safavid artists, such as Muhammad Zaman (fl. 1649–1704), probably studied painting under European artists, and from that time the use of perspective appears in their work. Their new, naturalistic style was a notable departure from the stylized appearance of miniature painting in Persia and became part of the Westernization movement (*farangisazi*) in the Safavid age (fig. 6.19). This movement blended Safavid artistic traditions with adaptations of European iconography and pictorial techniques. It is believed that Zaman’s inspiration was derived from European paintings and prints, of which plenty were circulating in Iran at the time.

The rediscovery of perspective profoundly affected not only art and architecture, but also urban and garden
design in Italy. A result of this visual shift was an emphasis in spatial progression in urban and landscape design. The Renaissance garden in Italy provided visitors with opportunities for diverse visual, spatial, and sensory experiences while gently directing them through space by using a succession of focal features: fountains, grottoes, statues, and fishponds. In many cases, these features were integrated into narrative or allegorical programs that helped unite the garden experience in terms of meaning. Meanwhile, a series of carefully calculated views allowed connecting the garden with the villa, the surrounding landscape, or even the city, visible from its terraces and balconies.

Drawing on the same artistic principles, Alberti, the theorist of the Renaissance villa, wrote,

A [villa] will be most attractive, if it presents a cheerful overall appearance to anyone leaving the city, as if to attract and expect visitors. I would therefore make it slightly elevated; and I would make the road leading up to it rise so gently that visitors do not realize how high they have climbed until they have a view over the countryside.” According to Alberti, “There should be gardens full of delightful plants, and a garden portico where you can enjoy both sun and shade. There should
also be truly festive space; and small streams breaking out in several unexpected places. Walks should be lined with evergreen plants. In a sheltered place plant a hedge of box; it will be damaged and waste if exposed to the open sky, to the wind, and particularly to sea spray. Phiteon of Agrigentum had in his own private house three hundred stone vases, each with a capacity of one hundred amphorae; such vases make a good garden ornament in front of fountains. As for vines, the ancients would train them over their garden walks, supported by marble columns, whose thickness was one tenth their height and whose ornaments were Corinthian. Rows of trees should be laid out in the form of the quincunx as the expression is, at equal intervals and with matching angles. Let the garden be green with rare herbs and those which physicians value.

Using the same principles, in the Cortile del Belvedere at the Vatican Palace in Rome, designed from 1506 by Donato Bramante, architectural elements were used to reinforce the perspectival organization of the complex (fig. 6.20). Conceived as a single enclosed space, this long courtyard joined the papal palace with the Villa Belvedere in a series of terraces connected by stairs. The symmetry and balanced proportion conveyed by regular fenestration contributed to a sense of directional movement. Although the terracing altered perspective views, the architectural ensemble harmonized the whole by creating a feeling of movement despite the challenge of changing elevations.

In terms of its spatial characteristics, the design of the sixteenth-century Villa Lante manifests a largely analogous approach (fig. 6.21). Here, the terraced arrangement of formal gardens follows the natural slope of the hillside. Though it is disputed whether the garden should be traversed from the bottom of the hill or the top, Pope Gregory XIII’s well-documented visit in 1578 began at the top of the garden, which indicates that this path was the suggested one. The architect Jacopo Barozzi da Vignola dealt with this slope (a difference of about sixteen meters from the top to the bottom of the hill) by creating three terraces. The architectural and sculptural elements created a natural progression that began at the top of the hill at the Fountain of the Flood in the form of a rustic grotto flanked by two small hunting lodges. By following the descending water, which passed through various architectural features, the viewer eventually arrived at a gap between the two casini, which allowed the perfectly manicured parterre. The flow of water, and consequently the view, in this way seemed to suggest the passage from nature to civilization: beginning in a primitive grotto, where it dripped as if from natural condensation, it finally reached the still pools that surrounded an elaborately sculpted fountain.

This site-oriented design approach was applied to most Mughal gardens in the Indian subcontinent. The engagement of Mughal gardens with their site, most likely inherited from Persian gardens during the Timurid era, was largely to do with their location. The hilly and mountainous areas of northern Afghanistan and the Kashmir valley forced designers to incorporate undulating topography into their designs. One of the earliest examples of this approach was Babur’s Garden in Kabul (1528), set into the side of a mountain. The Bagh-i Babur (Garden of Babur) was developed around 1528, when, according to Babur’s detailed descriptions in his memoirs, the Baburnama, he gave orders to construct an “avenue garden” in Kabul. The building of this garden on different terraces, while having a main linear axis towards the pavilion (which housed Babur’s tomb after his death) at the top, offered unique views of the city from the gardens, similar to those we see...
6.21 Aerial view of Villa Lante near Viterbo in central Italy.

6.22 Babur Gardens.
in some Renaissance gardens. Babur's Garden was therefore one of the first Mughal gardens in which metaphorical and visual connections were made between the city and garden (fig. 6.22).

Engaging the rich topography in the design remained a basic feature of late Mughal gardens in unvaried sites; an example can be seen in the Shalimar Gardens, constructed by Shah Jahan in 1619 (ninety-one years after Babur's Garden) near Srinagar City in Jammu and Kashmir (fig. 6.23). Although neither Babur's Garden nor the Shalimar Gardens were open to the public, they both formally engaged with city, topography, and natural elements (a mountain and a river, respectively). Similarly, both royal mausoleum gardens in Mughal India—Humayun's Tomb in Delhi and the Taj Mahal in Agra—were connected with their larger surroundings by being laid close to the river. Humayun's tomb was connected to the city by public buildings attached to this private garden, making it a semi-public entity (fig. 6.24). The physical connection between the Taj Mahal and the city became even stronger with the provision of three gateways rather than a single entry. Having the mausoleum at the end of the main axes in the Taj Mahal further strengthened the connection between the city and the mausoleum.

In contrast to the Shalimar Gardens and Babur's Garden, the northern part of Chaharbagh Street (close to the historical site) was designed on a relatively flat site, on which topography was not necessarily an issue. To compensate for this topography, which did not allow creating varied views and offering a richer spatial experience,
Safavid planners needed to define the spatial progression in a different way. They based their approach on a multi-axial promenade from the old bazaar in the north to the Hezar Jarib Garden at the southern end of Chaharbagh Street, beyond the city's confines. The royal promenade offered a perambulation from Naqsh-e Jahan Square to Chaharbagh Street and thence to Si-o-seh Pol, the Safavid Bridge, which connected the southern suburbs of Jolfa (the new Armenian settlement) to the historic city (fig. 6.25). Rows of trees on both sides of this street led from a garden and pavilion. These trees provided a perspective view toward the river on the southern side and the garden pavilion on the northern side, enhanced by the natural topography. The entertainment and leisure value of Chaharbagh Street, together with the terraced gardening scheme of Hezar Jarib or Abbasabad, reiterated its role as a public space within a stratified environment. As Sussan Babaie writes, the Hezar Jarib Garden “lent the palatial retreat the twin distinction of being a suburban palace while remaining within the range of royal spaces of Isfahan.”

Although we are not certain if Safavid planners had any direct knowledge of Italian perspective construction, Persian artists such as Muhammad Zaman and his students did learn perspective and used it in their paintings. The uniqueness of the spatial progression applied to the design of Chaharbagh Street is that it occurred on an urban scale and not merely in a single garden. This street defined an axis for public and royal recreation, a revolutionary concept that made it a public rather than a royal or private facility. The significance of the spatial experience in Chaharbagh...
Street, in other words, lay in its use as a public space that allowed social communication and exchange within the still authoritarian, hierarchical context.

Public Uses of Gardens

In fifteenth-century Italy, Alberti propagated the healthful recreational power of the countryside villa as an alternative to city life and, at the same time, a means of reviving the traditions of the classical era. This outlook encouraged an appreciation of rural life, with gardens conceived in harmony with their natural surroundings. Furthermore, Ciceronian beliefs defined education as a means of self-improvement that develops from the ability to understand nature’s offerings. Thus, Erasmus, in his Convivium religiosum, considers gardens sites “where the self is restored” and “nature is no longer silent or alien but ‘speaks to us all the time.’”

By the end of the sixteenth century, however, gardens became increasingly integrated into city life, no longer being exclusively associated with country living. Some scholars associate this transformation with the rise of the middle class. Garden historian and sociologist Michel Conan explains how the opening of a few large royal gardens to the wealthy people of Paris allowed the development of several new forms of social practices and encounters in the early seventeenth century. He refers to the increasing number of carriages, garden and conversation circles, daily walks in public places, new gender relationships, display of clothes and the latest fashions, new forms of sociability, and the development of newsmongers, which stimulated public opinion, as the major cultural transformations of city life in Paris.

This increasing integration of gardens into the public sphere was not just a European phenomenon. By exploring Mughal historical documents, historian Irfan Habib highlights the new social and economic functions acquired...
by some Mughal royal gardens. For instance, according to a description left by Jean de Thevenot (1666), the Jahanara Garden at Surat was probably open to visiting foreigners and therefore probably at least some members of the public. Some imperial Mughal gardens were open to the public in the modern sense as well. The Taj Mahal (fig. 6.26), for example, is mentioned by Bernier, a French traveler and personal physician to the seventeenth-century Mughal emperor Aurangzeb: he describes how the poor were admitted into the galleries three times a week during the rainy season to receive the alms founded in perpetuity by Shah Jahan. Indeed, the whole garden seems to have been accessible to public, except for the chamber containing the tombs, which was opened once a year. The royal garden at Ahmedabad was seemingly designed with similar features (long walls, beds of flowers, foursquare plan, a pavilion at the center) and was also open to public. Another characteristic that tied Mughal gardens, such as the Taj Mahal and Humayun’s Tomb, to their urban sites was the placement of the public markets attached to these gardens: these made the whole area public, although the gardens were not initially designed as public spaces.

In her study of eighteenth-century Ottoman Istanbul, Shirine Hamadeh argues that the emergence of public gardens intersected with three concurrent developments: the building patronage of a ruling class aspiring to restore its
recently sullied image, changing rituals of sociability and recreation among the middle classes, and state concerns about public order. These features seem to be comparable to those relating to the design of Chaharbagh Street in the early sixteenth century. In this sense, it needs to be emphasized that Chaharbagh Street was ahead of other gardens in Mughal India, which were mainly designed for the royal families. As mentioned earlier, Chaharbagh Street was in proximity to the main public space in Safavid Isfahan, Naqsh-i Jahan Square, which was designed as a replacement for the old Seljuk Square and was used as the main domain for public gatherings, festivals, religious ceremonies, army parades, public punishments such as executions, and temporary markets. While the square was delineated as the main place for public gatherings, Chaharbagh Street was intended as the recreational area of the city, a space for both royal and public promenades (fig. 6.27). During certain times, as we have seen, it was only open to Shah 'Abbas and his heram and courtiers, although in general it was also open to public. This stands in contrast with what we know of pre-Safavid cities in Persia, in which gardens were perceived solely as private properties. For instance, Clavijo’s accounts of Timur’s gardens in Samarkand and ‘Abdi Beyk’s descriptions of Shah Tahmasp’s garden in Qazvin emphasize the role of gardens as royal possessions. Almost no earlier historical account...
6.28 Khwaju Bridge.
Gardens of Isfahan and Italy

refers to any garden designed as public space along the lines of Chaharbagh Street.

In order to understand the urban role of Chaharbagh Street in Isfahan, it should be noted that this street was only one element within the broader Safavid master plan. Chaharbagh Street served as a passage connecting the Naqsh-i Jahan Square to the southern side of the river, in which the Armenian quarter of Jolfa was located. This was the beginning of an axis that ended to Hezar Jerib gardens in the southern suburbs of the city. The Si-o-seh Pol Bridge (as well as the Khwaju Bridge, almost half a mile away from Chaharbagh Street) was part of this axis, which enabled people to move between the northern and southern banks of the river (fig. 6.28). Chaharbagh Street was defined as a place for social meetings and gatherings not only for men but also for women, who were permitted here. The bridge, too, was defined as a public space, facilitating transportation to the southern states of Persia. In the master plan, both street and bridge were part of the royal agenda to enhance transportation in the Safavid Empire and make it an economic center on the Silk Road. Stories refer to the coffeehouses on both bridges on Isfahan, Si-o-sepol and Khwaju, as settings for public conversation. Public gardens and outdoor public spaces were thus the natural extension of a burgeoning urban and public culture of coffeehouses (qahveh-khaneh), public fountains (saqa-khaneh), restaurants, and local bazaars.

As mentioned above, the gardens and urban culture of Isfahan were described in detail by Persian historians and foreign travelers. Occasional contradictions in descriptions of urban life refer to the differences between the perception of historians (as insiders) and travelers (as outsiders). For instance, some travel writings convey a sense of European superiority and make no effort to be objective.78 Despite these variations, all of these descriptions confirm that Chaharbagh Street, as an expression of the king’s political will, was a device used to impress the image of his authority on foreign visitors while performing an important social function as a publicly accessible urban promenade.

Isfahan’s master plan proved to be the result of a comprehensive vision of gardens as private and semipublic elements that no longer belonged to the ruling class, unlike their precedents in the Timurid era. The Safavid development plan aimed to enhance public participation in the affairs of the capital city of the Persian Empire, over which the king presided as the highest authority. Correspondingly, the city’s public squares, bridges, and gardens provided opportunities for meetings, the sharing of opinions in public, religious or cultural promenades, informal encounters among people, and dissemination of news.79 All of this displayed the wealth and sophistication of Isfahan as a stage for Persian civilization to the increasing number of travelers, a civilization whose identity was tied to Shi’ism. Within this context, the garden became endowed with a special significance and developed into an integral component of urban life. The Chaharbagh and its gardens contributed to the development of public spaces of communication as they attracted different groups of people, allowing them to experiment freely with new public attitudes and practices. Chaharbagh Street—like many urban gardens of the Italian Renaissance—served as a testimony to the rising status of the middle class, while defining the normative sphere within which public life was to take place (fig. 6.29). It additionally defined a changing relationship between the new middle class and the dominant aristocratic elite, a dynamic that otherwise could have been considered a threat to the elite’s previously unchallenged power in the cultural and political life of the city.
Conclusion

These parallel developments in the gardens of Italy and Persia seem to reflect the concurrent changes that affected European and Middle Eastern society in the late sixteenth and early seventeenth centuries, leading to the recognition of the greater political, social, and aesthetic importance of green public spaces. The best example of this is Chaharbagh Street in Isfahan. While no travel or history accounts refer specifically to direct exchanges between the Safavid and European courts in relation to garden design, the influence of Italians in particular is plausible because of both geographical proximity and political relations, perhaps in some cases mediated by Ottoman Turkey.\textsuperscript{80} In general, the revolutionary changes in urban design in Isfahan—the relationship between city and garden, the development of hydraulic technology, and the increasing accessibility of gardens to public use—suggest important commonalities in terms of both approach and design elements.

Although some of these developments were inherited from the Timurid era, the significance of Chaharbagh Street lies in the prominence given to these new features. Its most
important aspect is that the city and its elements, such as public squares and streets, were seen as a continuation of gardens and as urban landscapes. They encouraged a new urban culture, with the garden increasingly seen as a public place, a notable departure from earlier gardens designed as private spaces for the wealthy and powerful. Yet, at the same time, Chaharbagh Street was also an important means of royal self-representation, continuing the tradition of the earlier Timurid gardens in Samarkand, Herat, Tabriz, and Qazvin.

The emphasis on space and linear perspective, also apparent in Western-style examples of Safavid painting, is the main principle behind the design of Chaharbagh Street in Isfahan. Patterns of circulation and social interactions were prioritized within a culture that tended to place more significance on the use of gardens in the urban context. Rising Shi’ism and an imperial identity based not on ethnicity but on a shared religion and culture, and the appropriation of the distant Achaemenid history and culture, affected both architecture and urban design. The idea of Chaharbagh as a garden street maintained its vitality and function of a cultural stimulus over the centuries.

As an element of urban typology, this pioneering design became a driving force behind imperial city planning in the post-Safavid era, being adopted as a model for other Iranian cities such as Shiraz and Kerman. Today, although most gardens along the sides of the street have been replaced with commercial and cultural complexes, this main axis still functions as the primary recreational area of the city.

NOTES

1. Shah ʿAbbas moved his capital because Isfahan is located in the center of Persia, safely away from the Ottomans and Uzbeks on the western and eastern boundaries.


3. The Safavid square, Naqsh-i Jahan, functioned as an imperial center for cultural, religious, political, and economic activities. Naqsh-i Jahan Square (the meydan) included two magnificent mosques, Shah and Lotfallah, a royal palace, Ali Qapu, and the portal gate of the main bazaar. Shah ʿAbbas also constructed two great bridges in Isfahan, Allah Verdi Khan and Khwaju, which not only connected the south and north of the city, but were also places for the king and ordinary people to enjoy the natural beauty of the Zayanderud River.

4. Sir Anthony Shirley, with his younger brother Robert, first traveled to Persia in 1598. Robert remained there, married a Circassian woman, and, in 1608, was sent by Shah ʿAbbas as an envoy to the British court of James I to enlist support against the Ottoman Empire.


8. Ruy González de Clavijo, a nobleman of Madrid, was the ambassador of the Spanish king, Henry III of Castile, to the court of Timur. He arrived in Samarkand on September 8, 1404, and spent a couple of months in Timur’s court. Clavijo’s diary of the journey, which recorded his observations during his trip, was originally published in 1582 and later in English in 1859. His notes on the court and the royal gardens, buildings, and tents are not only the most detailed descriptions of Timur’s court by a Westerner, but also a unique model of this type of writing among travelers’ records in the Persianate world. Clements R. Markham, preface to Narrative of the Embassy of Ruy Gonzalez de Clavijo to the Court of Timour at Samarcand, AD 1403–6, trans. Clements R. Markham (London: Hakluyt Society, 1859; repr., New Delhi: Asian Educational Services, 2001), i–x.


12. This impression has been emphasized by the historian Terry Allen, who argues that the axial arrangement of the pavilions and gardens in Chaharbagh Street was directly derived from the organization of Timurid gardens. Terry Allen, Timurid Herat (Wiesbaden: Ludwig Reichart Verlag, 1983), 55.


15. Ibid., 23, 9.

16. Ibid., 120.

17. Ibid., 114.

18. Ibid., 53, 9.


22. For the history and chronology of these villas, see David R. Coffin, The Villa in the Life of Renaissance Rome (Princeton: Princeton University Press, 1979).

23. There were theatrical performances in this garden, especially in the seventeenth century, which the public was invited to attend.


Jean-Baptiste Tavernier (1605–1689) was a French diamond merchant who is known for his travels through Persia. His Les Six Voyages de Jean-Baptiste Tavernier was published in 1676. His writings show that he was a remarkable cultural anthropologist. Muzaffar Alam and Sanjay Subrahmanyam, Indo-Persian Travels in the Age of Discoveries, 1400–1800 (Cambridge: Cambridge University Press, 2007), 352.

Sir Thomas Herbert (1606–1682) was born in York, England, in a minor aristocratic family interested in business affairs. He accompanied the royal embassy of Sir Dodmore Cotton from King Charles I to the court of the Safavid Shah ‘Abbas I in 1626–29. On his return he published the first English account of Persia. His writing is modest rather than profound, has a sense of wonderment, and is lacking in conceit: Herbert believes truth and simplicity are the essence of history. He himself claims that he did not want to publish his notes because he thought they were rude and undigested notions, though the simple truth, but that his friends forced him to it. Thomas Herbert, Travels in Persia, 1627–1629, ed. William Foster (London: G. Routledge and Sons, 1928; repr., London: RoutledgeCurzon, 2005), 1. John Butler, “Herbert, Thomas (2),” in Encyclopaedia Iranica Online, http://www.iranicaonline.org/articles/herbert-thomas-2 (accessed August 15, 2016).

Engelbert Kaempfer (1651–1716) was a German physician and traveler to Russia, the Orient, and the Far East. He was one of the keenest observers of foreign cultures of his time. His observations in Persia enhanced European knowledge of the Safavid court and of ancient Persian sites such as Persepolis. Detlef Haberland, “Kaempfer, Engelbert,” in Encyclopaedia Iranica Online, http://www.iranicaonline.org/articles/kaemper-engelbert (accessed August 15, 2016).

Robert Blair Munro Binning (1814–1891) worked as an administrator in the East India Company’s Service in Madras. He was familiar with Arabic, Persian, and Hindi and collected historic manuscripts. He traveled to Ceylon and Persia in 1847–49, which he described in his book Journal of Two Years’ Travel in Persia, Ceylon, etc. (New York: W. H. Allen, 1857).


26. Raised in a French Protestant family, Chardin was a jeweler who traveled extensively in Asia and wrote the most detailed foreign account of eighteenth-century Persia. As a jeweler, he received the royal patronage of Shah ‘Abbas II (d. 1666) and his son Safi Mirza. His employment in the Safavid court enabled him to become familiar with the Persian court and affairs there while staying in close contact with Persian society and culture. See Mohammad Gharipour, Persian Gardens and Pavilions (London: I. B. Tauris, 2013), 174. Although Chardin was not fully conversant with all aspects of Persian life and was more interested in economic and political issues, according to John Emerson, “his information on Safavid Persia outranks that of all other Western writers in range, depth, accuracy, and judiciousness.” John Emerson, “Chardin, John,” in Encyclopaedia Iranica Online, http://www.iranica.com.


29. Ibid. Babaie also explains, “With the Abbasabad extra-urban garden-palace and the Abbasabad suburban residential quarter, the urban topography, once again, makes visible the conceptual and practical relationships between the center and periphery, between the ruler and the ruled, or the capital and the empire.”


31. Ibid., 349. Fryer describes the interior design of this pavilion: “the summer-house is built entirely of polished marble, the arch of the cupilo is inlaid with massy gold, upon the walls are painted the famous actions of their heroes, the tank in the middle is all of silver, the posts are stuck with
looking-glasses, reflecting the postures of the body, and the figures of the whole fabrick; an hemispherical turret presses on four pillars, which are the main supporters" (350).

32. Although Binning does not mention the name of this pavilion, his descriptions of the ornamentation and the location of this garden in Chaharbagh Street reveal that he is referring to the Hasht Behesht pavilion.

33. Binning, Journal of Two Years' Travel, 143.

34. Ibid., 142.


37. Shahnama, written by the Persian poet Firdowsi (977–1010 C.E.), is the national epic of Iran and the Persian-speaking world.


40. Ibid., 17.

41. The seven fountains of the gardens include the Fountain of Pegasus, the Fountain of the Lamps, the Fountain of the Giants, the Fountain of the Dolphins, and the Fountain of the Chain. These fountains are found in the bosco, while the others are located in the formal gardens.


43. Thacker, History of Gardens, 104.

44. Chehel Sotun was probably named primarily because of the reflection of the twenty columns on the fountain in front of the complex. This approach, extending even to the naming of a building, shows that the role of the fountain was part of the design process, not an addendum. Some scholars believe that Chehel Sotun was a generic name for “multipillared hall.”

45. Turkaman, Tarikh-e ‘Alam Aray-e ‘Abbasi, 1544.

46. Sheikh-i Baha’i (1547–1621) was a philosopher, mathematician, scholar, architect, and astronomer in the Safavid court. He was born in Baalbek, Lebanon, but emigrated with his father to Iran during childhood. He was one of the earliest astronomers in the Islamic world to suggest the possibility of the earth’s movement prior to the spread of the Copernican theory. A number of architectural and engineering projects, such as Chaharbagh and Monar Jonban, are attributed to him.

47. The oldest distribution record of this irrigation system is a scroll attributed to Sheikh Baha’i. According to this scroll, there was no limitation in the use of water in winter and fall, but in the warm seasons water was to be obtained exactly in accordance with the order mentioned in the scroll. This order was implemented for farmlands as well as inside the city of Isfahan. Seyyed Hassan Hassaini Abari, “Modiriyat-i sonnat-yi Zayanderud” (Traditional management of Zayanderud water), Scientific and Research Journal of Isfahan University 15 (1998): 103.


49. Ibid., 4, 305.

50. Ibid., 253.


54. He has often been confused with Muhammad Paolo Zaman, who was sent to Rome by Shah ‘Abbas II to learn theology to counter Christian missionaries. Since he converted to Christianity, he escaped from Persia to India, where he obtained the protection of the Mughal emperor, Shah Jahan.


60. It was a Mughal tradition to choose a site as the emperor’s last resting place. Babur’s tomb was visited by his successors, such as Jahangir, who made a pilgrimage to the site in 1607, when he ordered that a prayer platform be laid in front of Babur’s grave and an inscribed headstone be placed on his grave.


62. Humayun’s Tomb was commissioned by Humayun’s first wife, Haji Begum, in 1569–70, and designed by Sayyid Muhammad Mirak, an architect from Khurasan. Mirak had also worked for Babur.


64. One example of this style is Muhammad Zaman’s painting (fig. 6.19) depicting a space similar to Chehel Sotun.

65. Pizzoni, “Fourteenth and Fifteenth Centuries,” 27.

69. Ibid., 75.
71. François Bernier (1625–1688) was the personal physician of the Mughal emperor Aurangzeb for about twelve years during his stay in India. He also wrote Travels in the Mughal Empire, which is based on his own extensive journeys and observations and on information from eminent Mughal courtiers who had witnessed the events at first hand. François Bernier, Travels in the Mughal Empire, a.d. 1656–1668, trans. A. Constable, ed. V. A. Smith (Oxford: Oxford University Press, 1916).
72. Ibid., 295–96.
74. Ibid.
78. As Chardin stated, his accounts were not simply chronicles of the Safavid court but were also meant to illuminate the difference between Louis XIV, “the greatest king in the world,” and “the superb ignorance of the Persian kings.” Babaie, Isfahan and Its Palaces, 19.
80. There is historic evidence proving the exchange of plants and horticultural techniques between France and Turkey. For more information, please read the chapter by Laurent Paya.
As far away as Tudor and early Stuart England may have seemed from the Islamic world, there were a number of significant modes of contact—personal, diplomatic, and commercial—that may have had an impact on ideas about art, architecture, and gardens. On a personal level, it is tempting to imagine that some of the remarkably complex buildings that Henry VIII erected in his gardens at Hampton Court were inspired by Catherine of Aragon’s descriptions of the miradores or viewing towers in the gardens of the Alhambra in Granada, where she spent many of the happiest years of her childhood. Catherine chose the pomegranate (granada) as her personal emblem, and it seems inconceivable that, during the happier days of her marriage, she did not share tales of the magnificent and famous gardens of the city she so reluctantly left.1

Diplomatic encounters with the Ottoman Empire resulted in a knowledge of and desire for the wonderful, exotic bulbs and plants native to that part of the world, which quickly became the most sought-after horticultural status symbols. The Levant (or Turkey) Company was chartered in 1581 and established factories (trading posts) across the Ottoman Empire and northern Africa. From the 1570s, William Harborne, the first ambassador to the Ottoman Empire (1583–88), was sending bulbs to William Cecil, Lord Burghley. This was just the beginning of an important horticultural link between England and the Islamic world.

From about the same time, the English were beginning to explore the possibilities of trade with the Great Mughals in India, and descriptions of Mughal buildings and gardens were sent to English patrons by agents acting to advance commercial exchanges between the two cultures. The focus of this chapter is on the artistic interaction between the Mughals and the English in the late sixteenth and early seventeenth centuries, concentrating especially on English descriptions of Mughal architecture and gardens. Most of these descriptions were sent in letters to patrons, but many
were also published very early on, making them available to a much wider audience. The question that must be asked is what—if any—influence such descriptions had on the garden-making elite in early Stuart England.

The English in India

In 1600, Elizabeth I granted a charter to the East India Company in an attempt to open up trade with India, which up to this point had been dominated by the Portuguese and Dutch. Even before the official foundation of the company, accounts of the dynamic Mughal Empire circulated amongst the elite. One of the first English visitors to India was Ralph Fitch, a merchant and traveler who was sent to India in 1583 with a letter to Akbar from the queen. On his return in 1591, he presented William Cecil with “an ample relation of his wonderfull travailes,” including brief descriptions of both Agra and Fatehpur Sikri, which he described as “two very great cities, either of them much greater than London and very populous.” Fitch—like many of those who would follow him—wrote about the luxurious merchandise, the magnificent architecture, and the exotic animals he saw. The romance of this distant empire was put firmly before the wider public in 1587 by Christopher Marlowe, whose Tamburlaine (based loosely on the life of Timur “the Lame,” founder of the Timurid dynasty) was one of the theatrical triumphs of the period and was published in “two comical discourses” in 1590. A quarter of a century later, Thomas Coryate set out for India with the goal of traveling to Samarkand, “to visit the blessed toombe of [Timur] who is famous in England.”

By the early years of James I’s reign, the number of Englishmen traveling to India increased. While out of courtesy most were entertained at court, they failed to make their mark because of their status as mere merchants and also because they did not provide suitably grand gifts for the emperor. Sir Thomas Roe, who arrived as the first official ambassador in 1615 and remained there until 1619, would write to the East India Company that their gifts “are extreamly despised by those who have seen them” (fig. 7.1). For Jahangir, he recommended cases of fine wine “more welcome than the richest jewel in Cheapside . . . pictures, lardge, on cloth, the frames in peces; but they must be good, and for varyetye some story, with many faces, for single to the life hath been more usuall.” For the queen, Roe recommended “fine needle woorke toyes, fayre bone lace, cuttworke, and some handsome wrought wastcote, sweetbagges or Cabinetts, wilbe most Convenient. . . . I would add any faire China Bedsteeds, or cabinets or truncks of Japan are here rich presentes.” He noted, too, that the gifts should be varied, “for they are soone Cloyd with one thing.” If Jahangir remained unimpressed by Roe’s gifts, which included an English coach as well as pictures, embroideries, swords, and liquor, he was very pleased that the English king had sent a knight of the realm, who carried out his duties with a gravitas that previous emissaries had lacked. Roe’s journal and letters (many to James I) give reliable accounts of court life, but with an emphasis on his attempts to establish trading rights for the English and with only occasional details about architecture or gardens. Unlike many ambassadors to other parts of the world, Roe was apparently never asked to provide any plant specimens. His most frequent correspondent was George Lord Carew, whose letters to Roe were full of domestic and foreign affairs (and gossip). Carew’s only request for anything from India came on January 18, 1617, when he wrote that he would “be glad of any novelies from that country, especially books and coins.” Where Roe went was largely determined by the movement of the court itself, and he
traveled to Ajmere, Mandu, and Chitor, but never to either Agra or Delhi, the latter having been temporarily abandoned by the court until later in the reign of Shah Jahan.

One early traveler who did go to Delhi was the merchant William Finch, who in c. 1610 described “the sepulchre of Humayun . . . the tomb itself covered with a pure white sheet, a rich shamiana [dome] overhead,” generally acknowledged to be the predecessor of the Taj Mahal.12 Finch wrote about the riverside gardens at Agra and also left one of the most detailed descriptions of Lahore, “one of the greatest cities of the East,” describing the king's palace with its great courts and galleries.13 Finch was merely an agent under Captain Hawkins, but he seemed keen to record what he saw, and after he died in Baghdad in 1613 his journal was returned to the East India Company. It was later included in the Reverend Samuel Purchas’s *Hakluytus Postumus: or, Purchas his Pilgrimes*, published in 1625–26, an impressive, if somewhat unwieldy, four-volume compilation of travelers’ letters, reports, and tales.14 Purchas, who claimed never to have traveled more than two hundred miles from his birthplace in Essex, spent over twenty years collecting both written and oral accounts of travel throughout the world, and when the book was published it was the largest book ever printed in English. For the curious Englishman it was a treasure trove of exotica. But there were also travelers who went to the expense of publishing their own accounts independently. Following a trip to India in 1609, Robert Coverte published *A true and almost incredible report of an Englishman . . . with a discovery of a Great Emperour called the Great Mogoll, a Prince not till now known to our English Nation*, dedicated in 1612 to Burghley’s son, Robert Cecil, 1st Earl of Salisbury.15 Not much is known about Coverte, but he was obviously trying to gain favor with the lord treasurer, even though Cecil surely already knew of the “Great Mogoll.” The Reverend Edward Terry, who had gone to India as chaplain to Sir Thomas Roe, published his accounts in 1655.16 Thus, there were a surprisingly large number of published descriptions of Mughal India, written by enthusiastic observers, available to the literate Englishman.

The peripatetic Thomas Coryate arrived in India in 1615 and is unique in being the first to go out of sheer curiosity, rather than as a religious, commercial, or diplomatic agent. He made it clear that he intended from the beginning to write about his experiences, a follow-up to his successful *Coryat’s Crudities* (1611), based on his journey on foot
Although Coryate died of dysentery in 1617 without achieving his goal of visiting Samarkand, his letters were immediately issued as a pamphlet. Coryate had written, “I have rid upon an elephant since I came to this court, determining one day (by Gods leave) to have my picture expressed in my next booke sitting upon an elephant.” As a tribute, the publishers included three woodcut illustrations showing Coryate riding an elephant, and the pamphlet proved so popular that it was reprinted on the same day (March 24, 1617) (fig. 7.2). Coryate had been a member of the literary and intellectual group that met regularly at the Mermaid Tavern in London and included John Donne, Ben Jonson, and Inigo Jones, who all had contributed mock-panegyric verses to Coryat’s Crudities. All of these influential men would have been interested in Coryate’s observations.

While many English visitors commented on architecture and gardens, the most significant, for our purposes, was Peter Mundy (c. 1596–1663), who went to India first in 1628 as a factor of the East India Company (so after Purchas’s publication). Although he was a diligent employee, his journals were not meant for his employers, but “to pleasure such Freinds . . . Thatt are Desirous to understand somwhatt off Forraigne Countries.” What he wrote was far less concerned with business matters than with precise observations of the country and its people, architecture, and landscapes. Although not published until the twentieth century, there were several manuscript copies of Mundy’s journal that seem to have circulated during his lifetime, although it is very difficult to trace them or their possible movement. Two contemporary copies survive: that of the well-connected merchant and diplomat Sir Paul Pindar, a partial copy that ends in 1634 (British Library Harl. ms 2286); and the Itinerarium Mundii at the Bodleian Library (Rawlinson ms A.315), the only complete copy, which includes Mundy’s sketches, the earliest surviving authentic Western images of Indian architecture and gardens.

The Mughals

The period under consideration here (the late Tudor and early Stuart periods in England) corresponds to the reigns of the three greatest Mughal emperors—Akbar (1556–1605), Jahangir (to 1626), and Shah Jahan (to 1656)—and was
undeniably one of the supreme periods of building and garden-making in history. Furthermore, it was a period of extraordinary tolerance, evident in the account of one of Thomas Coryate’s more flamboyant demonstrations. Edward Terry wrote, “Master Coryat [often hearing [the muezzin] in Agra, upon a certaine time got up into a turret, over against the priest, and contradicted him thus in a loude voice. . . No God but one god, and Christ the Sonne of god; and further added that Mahomet was an imposter.”

Terry continued, “In many other places of Asia, where Mahomet is more zealously professed,” Coryat would have “forfetted his life” for such blasphemy, but “here every man hath libertie to professe his owne religion freely.” It is known that Akbar practised a syncretic Islam and Hinduism and both he and Jahangir were sympathetic to Christianity. In one of the king’s houses in Lahore William Finch noted “a picture of our Saviour (Jesus Christ)” on one side of the throne and on the other “of the Virgin Mary” (fig. 7.3). The pictures may have been based on religious images circulated by Jesuit missionaries, but Italians and even English also brought paintings of religious subjects as gifts.

All the Great Mughals were admirers of the finest Western art, some employing European craftsmen, including the Italians who created the luminous pietra dura ornaments of the Taj Mahal. Jahangir prided himself on his connoisseurship and collected European paintings, which inspired the portraits, naturalistic landscapes, and hunting and garden scenes that were produced during his reign. Roe wrote to the East India Company that they needed to send “fine, and rich Pictures, they comming out of Italy overland and from Ormus [the Portuguese port]: soe that they laugh at us for such as wee bring.” On the other hand, Roe warned against sending allegorical pictures, as they were likely to be misinterpreted: Jahangir had been offended by a picture of Venus with a satyr because the latter was dark-skinned, and so he felt it was “a scorne of Asiaticques.” In 1614, Nicholas Downton sailed from England with 117 oil paintings of unknown size, many of them meant for the Japanese market. Some of these may have been seen by Roe when, in 1616, he noted that in the upper part of the throne room at Ajmere “were sett out the pictures of the King of England, the Queene, my lady
Elizabeth, the Countesses of Sommersett and Salisbury and of a Citizen's wife of London.” Princess Elizabeth was the daughter of James I. The Countess of Somerset, Frances Howard, was awaiting trial with her husband for the murder of Sir Thomas Overbury. The Countess of Salisbury was the wife of the 2nd Earl and sister of Frances Howard. All of these courtiers were well known to Sir Thomas Roe, suggesting that he may have originally supplied the pictures himself. What impressed Jahangir the most, however, were fine portrait miniatures. In a famous incident, Roe presented the emperor with a miniature by Isaac Oliver (the finest miniaturist in England in the period), which Jahangir had copied by his court artists, later challenging Roe to distinguish between the original and the copies. Much to Jahangir’s amusement, Roe could not.

English Accounts of Mughal Architecture and Gardens

From the beginning, English visitors were impressed by the opulence of the Mughal court: Edward Terry wrote that “the Great Mogol, considering his territories, his wealth, and his rich commodities, is the greatest knowne king of the East, if not the world.” The English were fascinated by Mughal rituals, such as the annual weighing of the king on his birthday, when the opposite balance was filled six times with bags holding silver, gold, precious stones, cloth of gold, and other expensive textiles, spices, and, finally, grain. Roe described the ceremony in great detail, noting that the contents of some of the bags were to be distributed to the poor: “but I saw it carefully carried in, and none distributed.” The ceremony “took place in a very large and beautiful garden, the square within all water; on the sides flowers and trees.” Many visitors were equally impressed by the magnificent processions with “thousands of horsemen going breadthwise; then came . . . great Eliphants of state with coverings and furniture; most of them of Cloth of gold, the rest of rich stuffe, velvets, &c.” Mundy’s sketch of 1632 shows Shah Jahan, protected by a parasol, returning from Burhanpur to Agra after the Deccan war, accompanied by soldiers, trumpeters, and great elephants carrying copper drums and the imperial arms (fig. 7.4).

There was much to admire, too, about the architecture. The city of Fatehpur Sikri had been built by Akbar to celebrate the birth of his son (the future Jahangir) and was capital of the empire from 1569. Ralph Fitch was the only Englishman to visit before it was abandoned in 1585, when the capital was moved to Lahore. By 1609, William Finch wrote that the “famous city” was “all ruined,” noting, however, that “the Jami Masjid [the mosque],” a goodly spacious court . . . [was] about six times the largeness of London’s [Royal] Exchange.” Peter Mundy, who visited on February 25, 1633 (n.s.), wrote that Fatehpur Sikri would be “the only place that might any way resemble our European Citties, for comformitie of stately buildinges,” adding that “now it lyes in a manner of a heape . . . excepting the Kings howse, the great Messitt [mosque] and one Bazare.” He sketched the “conceited” stables, presumably because they were built in vertical stories rather than all on ground level. Even today, the remains of the city are impressive and retain many of those features that were admired by Westerners, particularly the fine tanks of water and galleried buildings.

William Finch wrote comprehensively about the new palace at Lahore, moving from room to room, admiring the fair “Devon cans” (diwani or audience chambers), “chounters” (presumably chabutras or raised platforms), and galleries opening on to courts, gardens, and the river. He also noted the paintings in the palace, including images of “angels,” “Banian dews” (Hindu monsters), and portraits...
of the king's ancestors, as well as paintings of Westerners.\(^\text{39}\)

Of the various gardens around the palace, he wrote,

> On the east-side . . . hard without the wall is the garden of Asoph Caun [Asaf Khan], small, neat, with walkes (planted with cypresse trees), divers tankes and jounters [chabutras]. . . . Beyond are other galleries and walkes . . . and behind, a small garden and garden-house. In the midst of the garden is a very stately jounter with faire buildings overhead, and a tanke in the center with large and goodly galleries amongst the foure sides thereof, supported with high stone pillars. Adjoyning to this is a garden of the Kings, in which are very good apples . . . almonds, peaches, figges, grapes, quinces, oranges, . . . roses, stock-gellow-flowers [gillyflowers], marigolds, wall-flowers, ireos [iris], pinkes white and red, with divers sorts of Indian flowers.\(^\text{40}\)

Even if not interested in pleasure gardens, most English visitors included some accounts of the landscape for its economic value and uses. In 1609, Robert Coverte was impressed with Burhanpur (the Mughal port used to control south India) for its wonderful merchandise, but also for its "fine rivers, ponds, orchards, gardens, pleasant walkes, and excellent faire prospects."\(^\text{41}\) One of Roe's most lyrical descriptions was of "a house of pleasure of the Kings" with "a handsome little garden with fine fountaynes; two great tanckes, one 30 stepes above a nother; the way to it inacces-sible, but for one or two in front, and that very steepe and
stony." He found it "a place of much melancholy delight and securitye, only being accompanied with wild Peacockes, turtles, foule, and Munkyes, that inhabitt the rocks hanging every way over yt."

In Jaipur, "the best Country I saw since my landing," Roe described one town as "one of the best built I ever saw in Indya, for that ther were some howses two storyes high. . . . It had been the seate of a Raza Rasboote [the Hindu Raj] before the conquest of Ecbarsa [Akbar]." Beside the house "stood a delicat grove of 2 mile long, a quarter broad, Planted by industry with Mangoes, Tamerins, and other fruictes, devided with walkes, and full of little Temples and alters of Pagods and Gentiliticall Idolatrye, many fountaynes, welles, tanckes, and summer howses of Carved stone, Curiously arched; so that I must confesse a banished englishman might have been content to dwell there."

Edward Terry wrote of the "curious gardens, planted with fruitfull trees and delightfull flowers, to which Nature daily lends such a supply as that they seeme never to fade. In these places they have pleasant fountaynes to bathe in and other delights by sundrie conveyances of water, whose silent murmure helps to lay their senses with the bonds of sleepe in the hot seasons of the day." He warned, however, that "lest this remote countrey should seeme like an earthly Paradise without any discommodities, I must needes take
notice there of many lions, tygres, wolves, jackals . . . and many other harmefull beasts,” including crocodiles, scorpions, flies, and “bigge hungrie rats.”

As evocative as these descriptions are, it was Peter Mundy who would complement his observations with drawings, some done at the time and others executed later. Mundy wrote that the “Designes or Figures [were] nott taken att Sight (Most of them) as they oughtt to have bin, butt long after, by apprehension off such things seenen.”

The pencil sketches, inked over, are drawn on loose papers, pasted on or between pages of the manuscript. Mundy’s drawings are remarkable because the only other contemporary European illustrations are those of Jan Huyghen van Linschoten, a Dutch merchant who was in India from 1583–88. Linschoten’s *Itinerario* (1596) contains the earliest-known published drawings of India and is considered a “watershed in Europe’s pictorial impression of Asia” (fig. 7.5). Yet the architectural forms of the pagoda and mosque (“mesquita”) are almost unrecognizable, as are the muscular, stylized torsos of the figures and distorted pull of the perspective. Clearly, Linschoten was depending more on European models than on his own experience or sketches, and his mosque bears a striking resemblance to the well-known engraving of the Mausoleum of Halicarnassus by Maarten van Heemskerck, whose fanciful and popular images of the wonders of the ancient world were executed in the 1570s. In contrast, Mundy carefully captured the racial characteristics of the people with a spontaneity and authenticity that were remarkable for the period (evident in the drawing of Shah Jahan). His drawing of the fort at Gwalior includes the landscape, gardens, tombs, and local houses, all carefully identified in a key at the bottom and elaborated upon by lively descriptions in the text: “the Castle above all is to bee admired, being a worke of Magnificence and gallant prospect, both Nature and Art haveinge bene very liberall and free thereon” (fig. 7.6). He added, “for my part it is the rarest place that ever I sawe, I speake for the outside of this Castle, and all in generall considered, it seemes rather the worke and monuments of the Auntient Romaines then of Barbarous Indians, as wee esteeme them, such is the wonderfull warlike and delightsome prospect of all.”

Like other visitors, Mundy commented on the numerous large artificial ponds and tanks of water, built in towns for both “common use,” and also by “great men and others [who] have them in their Gardens and dwellings of a lesser sort.” He described the tomb of Sher Shah Sur at Sasaram as “a very faire Tancke with a goodly Sepulcher in the
middst of it, with a bridge to goe to it, all of hewen stone. It is without question the formalist and largest Copula in all India.

This was, of course, before the completion of “Tage Moholl’s tomb,” which was being built when Mundy was there: “This Kinge is now buildinge a Sepulchre for his late deceased Queene Tage Moholl . . . whome hee dearly affected, having had by her 9 or 10 children, and thought in her life tyme to use noe other woman (which is strange if true consideringe their libertie in that kinde). He intends that it shall excell all other. The place appoynted [is] by the river side where shee is buried.”

Mundy also mentioned “three or four Christians that have pay from the Mogolls,” including “Signior Francisco (a Frenchman and an Embro[i]derer)” and “Signior Jeronimo Veroneo (a Venetian and a Goldsmith).” Later, Veroneo would be credited with designing the Taj Mahal by Western historians who could not imagine that it had not been built by a European.

Mundy wrote much about gardens in his chapters (or “relations”) on Agra: “Agra is scituated on the River Jemina [Yamuna]; The Castle and great mens howses on th’ one side . . . and their Gardens (which are many and faire) on th’ other side, yeildinge a most delectable prospecte.” He continued, “the gardens about Agra are many, but the chiefest are the Darree ca baug [Dehra Bagh] and King Akbars on this side of the river [the so-called left bank] and Mootee ca baag [Moti Bagh Padshahi] on the other side, the latter built by Nur Mahal”; remains of many of these gardens survive today (fig. 7.7).

Mundy’s descriptions of gardens in India are remarkably detailed and not difficult to visualize.

As these [gardens] are, soe are all the rest in generall, I meane the better sort . . . a great, high, large, faire, fower square brick wall, 4 Towers, att each Corner one, with their Copulaes, pillars and galleries. An arched gate; some have 2 and some 3 or 4. Theis comonly lead towards the midle (by long walks with rancks of Cypresse trees on each side), where is the cheife howse of pleasure and Tancke, haveing divers other roomes and tancks heere and there in the Garden, but this is the principall, which is curiously contrived, wrought and painted; and some Tancks of great compasse.
Mundy even included a description of the planting, one that is still relied upon today by scholars of Islamic gardens.

This square Garden is againe devided into other lesser squares, and that into other like bedds and plots; in some, little groves of trees, as Apple trees (those scarce), Orenge Trees, Mulberrie trees, etc. Mango trees, Caco [coconut] trees, Figg trees, Plantan trees, theis latter in rancks, as are the Cipresse trees. In other squares are your flowers, herbes, etc., whereof Roses, Marigolds (theis scarce only in Mootee ca baag) to bee seene; French Mariegolds abundance; Poppeas redd, carnation and white; and divers other sorts of faire flowers which wee knowe not in our parts, many groweing on prettie trees, all watered by hand in tyme of drought, which is 9 moneths in the Yeare. This, I say, is the generall manner, but the former [the three gardens mentioned above] excell both in greatnes and curiositie of buildinge, painteing, etts . . . the carved worke off through Cutt [perforated] redd stone much used in all their gardens and Tombre etts.59

Unlike early seventeenth-century gardens in England, some of the gardens described by Mundy can still be seen today, mainly because of the durability of the hard landscaping: the rills, pools, and platforms remain, as do splendid pavilions overlooking the river (fig. 7.8). Moti Bagh, sometimes called Ram Bagh (Babur’s Garden), is one of the best preserved. Created by Nur Afshan, the garden was also a favorite of her husband Jahangir, who frequently entertained guests there.60 Mundy wrote, “In Mootee ca baag were many roomes painted, which wee might perceive to bee drawne from Europe prints (of which they make accompt heere). Alsoe there was the picture of Sir Thomas Roe, late Ambassadour heere, as it was told us.”61 Although the pavilions survive with traces of their westernized frescoes, there is, sadly, no evidence of the picture of Sir Thomas Roe.

The East India Company’s Garden at Surat

As moved as he was by the splendid gardens of the court, one of Mundy’s most detailed drawings records the East India Company’s own garden in Surat, the port city in Gujarat that would remain the headquarters of the company for most of the seventeenth century. Mundy described “Suratt howse” as “of the best sort in Towne, very faire and stronglie built, the Rooffs in generall flat and tarrassed alofte to walke on. . . . Wee also have a garden which for its bignes is the neatest and costlyest in all the Countrey hereabouts.”62 The garden was “neere 4 square” and had four long, vine-covered trellised walks around it; “4 other allies” went from the middle of the long walks to the centre, “where stands a Chowtree [chatri or small kiosk, roofed or domed], or prettie roome, covered overhead to sitt and passe the tyme.” In front of the “Chowtree” was a “little Tancke to wash in tyme of heats and rayne, In the midst of which is a spowte, which att pleasure is lett to Runn.”63 Mundy’s sketch of the “pretie conceited Artififciall Waterworcke” shows the tank (complete with bathers) and a diagram of how the fountain worked: “I have hereunder sett the figure thereof, somewhat more or lesse”64 (fig. 7.9). Mundy describes how the spouts shoot the water up, hitting a “round plate fastned soe that the water, strikeing with violence against it, causeth it to defuse and disperse itselfe soe equally, every way, and every part of the water soe conjoyninge with the other that it perfectly resembles the halfe of a great glasse Globle or a Cristall Copula, the edge whereof is againe by the under [or outer] spowtess cutt.
into so many devisions like the valens of a Cannopie. He notes that “the Water that supplyeth this Tanck is drawne from a well by Oxen, which serveth also to Water the Garden” and that the garden contained “raritie of strange trees, flowers, fruits, herbes, etts., altogether unknoune in our parts.” There is no other contemporary English description, much less a drawing, explaining so clearly how a fountain played, and the delightful little fountain would have been a simple matter for a local hydraulic engineer.

In 1638, the German traveler Johan Albrecht de Mandelslo visited Surat and spent time at the English house and garden: the president sent a coach drawn by white oxen to collect him, so that he could join them “shooting at Butts [archery targets],” followed by “a Collation of fruit and Preserves” and a bath “in a Tancke or Cestern which had five foot water, where some Dutch Gentlewomen serv’d and entertain’d us with much civility.” It is not clear whether the fountain was still operating. An image said to be of this house was included in the 1727 edition of Mandelstal’s account, showing a walled compound with an open courtyard surrounded by various buildings (presumably lodgings and warehouses), all, as Mundy described them, flat-roofed. The garden appears to have been behind the complex; only the tops of trees are shown.
The Tomb of Akbar, Sikandra

In 1620, Edward Terry expressed the almost universal fascination with the Mughal practice of honoring their dead with great tombs and gardens:

Every Mahometan of qualitie in his life time provides a faire sepulcher for himselfe . . . encompassing with a firme wall a good circuit of ground, neere some tanke (about which they delight for to burie their dead) or else in a place nigh springs of water that may make pleasant fountaynes; neere which he erects a tombe, round or square, vaulted upon pillars. . . . The rest of the ground they plant with trees and flowers, as if they would make Elysian fields such as the poets dreamed of, wherein their soules might take their repose. They burie not within their churches. . . . But among many faire piles there dedicated to this use, the most excellent is at Secandra, a village three miles from Agra. It was beganne by Achabar-sha, this Kings father, who there lyes buried, and finished by this present King, who meanes to lye beside him.69

Akbar’s tomb (completed in 1612/13), unlike the earlier Tomb of Humayun and the later Taj Mahal, was not octagonal, nor domed. Instead, Jahangir used a different model, possibly Babur’s Tomb in Kabul with its cenotaphs on a marble platform at the top, open to the sky.70 The great supporting platforms, diminishing in size toward the top, consisted of pillared and frescoed sandstone with great Timurid pishtaqs (arched niches in rectangular frames) in the center of each side. Typically, though, this enormous building was set into a large walled garden, and all of this was recorded in Peter Mundy’s description and sketch (fig. 7.10).

Kinge Ecbars Tombe is at Shecundra . . . standing in a great Garden with four great gates, whereof one principall excellinge all others that I have seen in India for hight, curious Invention in buildinge, paintinge etts., haveing two extraordinarie high spires like to those att Constantinople from whence in a longe walke you goe to the monument itselfe whose outward frame resemeth the mausoleo pictured amonge the 7 wonders, fower square, lesseninge towards the topp, haveinge several galleries round about, adorned with Copulaes of which the lower galleries conteyne the more . . . theis galleries ascendinge one from another to the Topp, on which is a square little Court . . . where stands a Tombestone in forme of a herse of one entire peece of marble, curiously wrought and engraven with letters and flowers etts.71

Mundy could have read about the Mausoleum of Halicarnassus in ancient texts or seen the imaginative interpretation by Heemskerck (as mentioned above). He had been to Constantinople and sketched the numerous spires and towers there. Clearly there was nothing in England that he could compare it to, although in a marginal note he did provide the measurements: “The Compasse of the Sepulcher, every Square accompted from starre to starre [stair], by my computation is about 1/3 of an English mile.”72 “The said Tombstone,” he added, “lyes just over the place where the said kinge is buried. From hence being descended, and desirous to enter in, wee were not permitted, by reason the Kinge keepes the key of the doore which is alsoe sealed with his signett.”73

The accompanying sketch was made from memory: “the designde thereof I have sett downe on thother side as well as I can remember, but whether it bee 4, 5, or 6 Ascents I know not, Neither certaine of the Number of Copulaes, But sure I am there were but 4 on the Topp and more and
7.10  Peter Mundy, sketch of Akbar's Tomb, Sikandra. The Bodleian Library, University of Oxford, Rawlinson ms A. 315, inserted between fols. 72 and 73.
more to the Lowermost, and that the whole Fabrick is 4 square, such a stately gate and such rancks of small Cipresse Trees.” He noted that the gardens had not yet been finished, and certainly there are errors: the entrance gates (also not yet complete) were much too small; he completely missed the pishtags or large Timurid arches on each of the four sides of the tomb, and the proportions are wrong (fig. 7.11). In spite of these inconsistencies, Mundy captured the grandeur and distinctiveness of one of Mughal India’s greatest monuments and its gardens.

Conclusion

Soon after his return to England in 1619, Sir Thomas Roe delivered letters from Jahangir to James I. The first read, “When your Majestie shall open this lettre lett your royall hart bee as fresh as a sweete garden. Lett all people make reverence at your gate; lett your throne bee advanced higher; amongst the greatnes of the kyngs of the prophett Jesus lett your Majestie bee the greatest, and all monarch-ques derive their counsell and wisedome from your brest as from a founteyne.” A second letter began, “How gratious is your Majestie, whose greatnes God preserve. As upon a rose in a garden, so are myne eyes fixed upon you.” Jahangir had been given at least one portrait of James I, including the one that hung in the throne room mentioned above. One of these would have been used as a model by the artist Bichitr in his allegorical picture of Jahangir conversing with a Sufi shaikh while ignoring the secular kings of the world (including the Ottoman sultan and James I, both shown in the lower left of the picture), an allegory typical of his later,
more ascetic years (fig. 7.12). The portrait of James resembles the full-length portrait by John de Critz the Elder of c. 1606, which became the official portrait type in the early years of the reign and was frequently copied for courtiers and for diplomatic gifts. It was probably this image, perhaps in miniature form, on which Jahangir “fixed” his eyes.

One wonders whether James would have appreciated the emphasis on garden imagery in Jahangir’s letters. What was such an important metaphor to the Great Mughal may have failed to impress the British king, who—unlike his wife and sons—had never shown much interest in gardens. In contrast, Jahangir’s gifts of “two antelopes, a straunge and beautifull kind of red-deare, a rich tent, rare carpets, certain umbrellaes and such like trinckets” would have pleased a king who was known for his passion for hunting.

As for the numerous descriptions of Mughal architecture and gardens that flowed into England, is it possible to assess their impact? Certainly this was a period of great mutual curiosity. The interest in Western art, however, would be a short-lived phenomenon in the Islamic world. In contrast, an appreciation of the splendor and complexity of Eastern arts was beginning to grow in strength in Britain and, for that matter, throughout Europe. Van Dyck’s handsome portrait of William Fielding, 1st Earl of Denbigh (c. 1633–34, National Gallery, London), painted shortly after Fielding’s return from India and Persia, wearing glimmering silk pajamas and accompanied by an Indian servant boy, is an early example. More subtle was the influence of Indian art on the young John Vanbrugh, who traveled to Surat from 1683–85 as a junior factor in the East India Company. This visit, only recently discovered, and the little sketch of the cemetery in Surat that Vanbrugh made twenty-five years after his return have resulted in new thoughts on influences on Vanbrugh, the architect of some of the greatest Baroque monuments in England.

Peter Mundy also added sketches to his journal after his return, demonstrating a lingering fascination with Mughal culture and a desire to complement his earlier descriptions of it. Like John White’s first drawings of American Indians, Mundy’s sketches suggest admiration for a distinctly different foreign culture. Certainly Mundy’s writings cannot be interpreted as “proto-colonial”: the English could barely keep ahead of fellow Europeans in the

area, much less envision taking on the powerful Mughal
Empire. At the same time, it would be very difficult to argue
that these accounts had any direct influence on the inno-

vative builders and garden creators of the period, although
they all might have recognized that certain features already
evident in English gardens had parallels in India: an
unusual predilection for octagonal garden buildings; orna-
mental pools and baths; banqueting houses on islands; and,
not least, an emphasis on geometric order in the designed
landscape.82 The English would have been fascinated, too,
by the descriptions of unusual plants and flowers.

If it is difficult to see any direct influence of the
accounts of Mughal gardens on English gardens, these
descriptions are surprisingly more detailed and descriptive
than those of European gardens: all Mundy wrote about
the gardens of the Louvre, for example, was that “the Kings

Gardens [were] full of curious knotts and rare Inventions.”83

Even Fynes Moryson, the most important contemporary
chronicler of Italian gardens, was never as precise in his
descriptions of the Medici gardens, nor (as far as we know)
did he, or any other Briton, sketch them.84 All of this makes
Mundy’s drawings and descriptions all the more fascinating.
Yet their impact on his contemporaries remains unknown.
If the various copies of his manuscript were passed around,
no mention of that has yet been discovered. At the same
time, if his descriptions of Mughal gardens may have had
limited impact at the time, the clarity and completeness of
these descriptions and drawings have been recognized by
recent scholars, who have used them as important evidence
of what these magnificent monuments and their gardens, so
admired by early Stuart observers, were once like.85

NOTES

This essay was first published as “‘Elysian Fields Such as the Poets Dreamed
Of’: The Mughal Garden in the Early Stuart Mind,” in British Art Journal
10, no. 3 (2010): 35–45. Minor additions and clarifications have been made to the
article as it appears here.

1. On Catherine, see David Starkey, Six Wives: The Queens of Henry VIII
(London: Vintage, 2004), 11–256. Most published material about Catherine
of Aragon concentrates on the controversy of her divorce; very little focuses
on her background and what she might have contributed to the artistic
milieu of the early Tudor court.

2. On the origins of the East India Company, see John Keay, The
Honourable Company: A History of the English East India Company (London:
HarperCollins, 1991), 3–108. The most important imports were cotton, silk,
indigo dye, and saltpeter.

traveled with John Newberry, another merchant, as well as William Leeds,
a jeweler, and James Story, a painter; none of these left accounts. Fitch’s
accounts were published first in Rev. Samuel Purchas, Hakluytus Posthumus:
or, Purchas His Pilgrimes, 4 vols. (London, 1625–26; repr. in 20 vols.,
Glasgow: James MacLehose and Sons, 1905–7).

4. As quoted in William Foster, Early Travels in India, 1583–1619 (London:
Oxford University Press, 1921), 18. The idea of “wonder” and travel writing
has been the subject of a number of books and articles, as has the question
of whether these writings can be interpreted as “proto-colonial.” See Pramod
K. Nayar, “Marvelous Excesses: English Travel Writing and India, 1608–1727,”
interpretation. On the other side—and the one with which I am more
sympathetic in terms of the Tudor and early Stuart periods—see Richmond
Barbour, Before Orientalism: London’s Theatre of the East, 1576–1626
(Cambridge: Cambridge University Press, 2003), and his introductory notes
to “The East India Company Journal of Anthony Marlowe, 1607–1608,”

5. Quoted in Foster, Early Travels in India, 265. On Coryate, see Michael
Strachan, The Life and Adventures of Thomas Coryate (Oxford: Oxford

6. See Richmond Barbour, “Power and Distant Display: Early
English ‘Ambassadors’ in Moghul India,” Huntington Library Quarterly 61,
 nos. 3/4 (1998): 543–68. On the importance of gifts, see Anna Jackson and
Amin Jaffer, eds., Encounters: The Meeting of Asia and Europe, 1500–1800

7. William Foster, ed., The Embassy of Sir Thomas Roe to the Court of the
Great Mogul, 1615–1619, 2 vols., Works Issued by the Hakluyt Society, 2nd
ser., 1, 2 (London: Hakluyt Society, 1899), 1:77 (November 18, 1615). On Roe,
see “Roe, Sir Thomas,” in ODNB, 47:512–18.
9. Ibid.
10. Ibid., 2:352n.
22. Another early copy was originally in the East India Office, but is now also at the British Library: ms Eur K1.
23. As quoted in Foster, *Early Travels in India*, 315. Terry’s observations were first published in *Purchas His Pilgrimes*, 91–54; Terry published his own revised version, *A Voyage to East India*, in 1653.
24. Foster, *Early Travels in India*, 315. It is not surprising that Sir Thomas Roe found Coryate a great embarrassment.
26. Nicholas Downton, for example, brought a “Picture of Moses” for “the Nabob or governor”; see Nicholas Downton, *Extracts of the Journall of Nicholas Downton*, in *Purchas His Pilgrimes*, 4:219.
30. Among the works of art listed by Nicholas Downton were pictures of “Mars and Venus,” a “Judgment of Paris,” and a “Moses.” *Purchas His Pilgrimes*, 4:219.
31. Foster, *Embassy of Sir Thomas Roe*, 1:143. There was also a picture of Sir Thomas Smyth, governor of the East India Company. He noticed some of these paintings again a year later (ibid., 2:394). Princess Elizabeth was the daughter of James I. The countess of Somerset (Frances Howard) was with her husband, awaiting trial for the murder of Sir Thomas Overbury. The countess of Salisbury was the wife of the second earl and sister of Frances Howard. All of these courtiers were well known to Sir Thomas Roe.
32. Foster, *Early Travels in India*, 225; *Embassy of Sir Thomas Roe*, 1:213–14, 224–26. Oliver was identified as the artist in Roe’s accounts: BL Add. ms 6115, fo. 276.
35. Ibid., 2:411–12.
43. Ibid., 2:360–61.
44. Terry, quoted in Foster, *Early Travels in India*, 303.
45. Mundy, *Travels of Peter Mundy*, 1:4.
46. Linschoten (1563–1611) was best known for copying important Portuguese maps in Goa, which were published by Cornelis Claesz. Linschoten’s drawings were engraved by Baptista van Doetecum. Jackson and Jaffer, *Encounters*, 58.
47. For example, ibid., 218–19.
48. Jan Huysghen van Linschoten, *Itinariuo: Voyage ofte schipvaert van Jan Huysghen van Linschoten naer Oost ofte Portugaels Indien* … (1596), published in translation in 1598 as John Huysghen van Linschoten: *His Discours of Voyages into ye Easte & West Indies*. For a more recent study by Ernst van
den Boogaart, see Jan Huuygen van Linschoten and the Moral Map of Asia (London: Roxburghe Club, 1999).

49. Mundy, Travels of Peter Mundy, 2:61.
50. Ibid., 2:62. Mundy's accounts also say much about poverty and the brutality of the punishments and practices of both Muslims and Hindus.
51. Ibid., 2:31.
52. Ibid., 2:129–30. Sher Shah Sur was the emperor of North India (1540–45) during the Islamic Sur (Afghan) dynasty of 1540–56.
53. Ibid., 2:212.
54. Ibid., 2:208. Both were living with the “Colledge of Jesuits” in Agra.
55. On the extent of this debate, see Koch, Complete Taj Mahal, 249.
56. Mundy, Travels of Peter Mundy, 2:207. Many of these gardens were recorded in a beautiful map made for the maharaja of Jaipur in the 1720s. See Koch, Complete Taj Mahal, fig. 17.
57. Ibid., 2:214.
58. Ibid.
60. On Moti Bagh Padshahi (also Bagh-i Nur Afshan), see Koch, Complete Taj Mahal, 37–40.
61. Mundy, Travels of Peter Mundy, 2:215.
63. Ibid., 2:26.
64. Ibid., 2:27. The figure is reproduced facing 2:27.
65. Ibid., 2:26–27.
66. Ibid., 2:27.
68. Johann Albrecht von Mandelslo, Voyages . . . faits de Perse aux Indes Orientales . . . (Amsterdam, 1727), 58.
69. Terry, quoted in Foster, Early Travels in India, 315–16. His account was also published in Purchas His Pilgrimes, 4:75. In fact, Jahangir was buried in Lahore. Robert Covert had noted that the tomb was still unfinished in 1609, although “already 9 yeeres in building, and will hardly be finished in 5. Yeeres more, and yet there are continually 5000 workmen at worke thereon.” Covert, True and Almost Incredible Report, 41. Mundy also commented on the unusual burial traditions of the Muslims. Mundy, Travels of Peter Mundy, 2:229.
70. Koch, Complete Taj Mahal, 85–88, figs. 103, 106 and 107.
71. Mundy, Travels of Peter Mundy, 2:210–11.
72. Ibid., 2:212n1. Finch and Hawkins both described Akbar's tomb; see Purchas His Pilgrimes, 4:75–77 and 3:50–51, respectively. Each of the writers gives different distances from Agra and also different measurements for the monument itself.
73. Mundy, Travels of Peter Mundy, 2:211.
74. Ibid., 2:211–12.
75. The letter is printed in full in Foster, Embassy of Sir Thomas Roe, 2:557–58 (from BL Add. ms 4155, fol. 100).
76. Ibid., 2:559.
78. For a discussion of the de Critz portrait, see Karen Hearn, ed., Dynasties: Painting in Tudor and Jacobean England, 1530–1650 (London: Times Newspapers, 1995), cat. no. 125, 184–85. The portrait shows the king in three-quarters view wearing a tall, plumed hat with a large jewel. Minor differences—the omission of the George medal, for example—may be due to the reduction of size of the portrait. The original painting by de Critz is in a private collection.
79. Foster, Embassy of Sir Thomas Roe, 2:211, quoting from John Chamberlain’s letter to Sir Dudley Carleton of October 2, 1619.
81. John White’s drawings, as shown in engravings by Théodore de Bry, were incorporated into Mughal paintings. See Sheila Canby, “Source of Inspiration: A Mughal Painting of a Hunter and His Wife Based on a John White Drawing,” British Museum Magazine (Winter 2008): 42–43. I am grateful to Claire Gapper for this reference.
83. Mundy, Travels of Peter Mundy, 1:127.
85. For example, in Koch, Complete Taj Mahal, 30–32, 34, 54, 97, 98, 138, 139.
Garden Encounters

Portugal and India in the Sixteenth and Seventeenth Centuries

Cristina Castel-Branco

Mid-sixteenth-century Portuguese Renaissance gardens in and around Lisbon, which were commissioned by Goan viceroys and nobility returning from India, reflect the garden and architectural traditions of that region. This period also witnessed the expansion of the Mughal Empire across conquered northern Indian cities—and with it a profusion of architectural developments, including gardens of the chaharbagh type. At the same time, the Portuguese conquered cities along the western coast of India and for two hundred years controlled maritime trade with Europe. This cultural contact is evidenced in early Renaissance garden-making in Portugal.

The art and architecture of historic Indian and Portuguese gardens are examined in this essay through the eye of the landscape architect, with a particular focus on building materials and techniques, hydraulics, and topography. Old gardens inevitably represent a complex cooperation with nature that has required vision and rigor to endure. When it lasts for centuries in tune with natural processes (rain, sun, plants, water and soil) and captivates generations of visitors, it deserves a thorough analysis of its many facets in a technical, artistic, and socio-political context. Because garden design reflects a moment in cultural evolution, this analysis requires a historical overview. Indeed, the gardens examined herein encapsulate not only the meeting of two cultures—Indian and Portuguese—but also the dynamic ideas of their creators, albeit in a context little known in the Anglo-Saxon world. These Indian and Portuguese historic gardens will be examined along four lines: (1) a thorough on-site survey to register their spatial features, focusing on water design and ecological elements; (2) a study of their historical contexts; (3) a comparative analysis establishing similarities between styles and design solutions using four garden elements—composition, built structures, hydraulic systems, and decorative elements; and (4) a study of possible transmission methods between the two cultures.
The Indian influence in Portuguese gardens will be examined via the features and historical elements of five existing gardens dating from the sixteenth and seventeenth centuries. Concurrently, a comparative analysis of Indian gardens of the same period will include research on Mughal gardens, water devices, and the historical interchange between the two cultures. The first garden is D. João de Castro’s Quinta da Penha Verde Garden in Sintra (c. 1540). The second is Brás de Albuquerque’s Quinta da Bacalhoa Garden in Azeitão (c. 1550). The third is the Jardim do Núncio (Nuncio Garden) at Quinta da Penha Longa in Sintra (c. 1560), commissioned by King D. John III. The fourth is D. Diogo d’Eça’s Quinta das Torres Garden in Azeitão (c. 1570), and the fifth is João de Mascarenhas’s Fronteira Garden (fig. 8.1) in Lisbon (c. 1660).

To set the historical context, after 1510 the coastal areas from Bombay to Diu became part of the Portuguese domain in India by agreement with the sultan of Gujarat, who sought control of Indian Ocean trade routes. An initial period of largely peaceful coexistence with the Hindu
Portugal and India

Culture lasted from 1500 to about 1550, followed by a second period when the influence of the Mughal culture becomes more evident in Portuguese trading objects and subsequently in garden design. At the time these five gardens were being built in Portugal to celebrate the Indian viceroys’ glories and fascination with India, the relationship between Mughal emperors and the Portuguese in Goa had been improving since their initial contact around 1530. It was then that the Portuguese, the first *firangis* (foreigners), came into personal contact with Emperor Akbar, which persisted until the end of Shah Jahan’s reign (c. 1670).

Vasco da Gama and Babur arrived in India almost simultaneously at the turn of the fifteenth century. After Vasco da Gama’s successful journey in 1498 from Lisbon to Calicut, thus establishing the seaway to India, the Portuguese created a stable political entity in Goa—despite the fact that the newcomers faced some initial antagonism from the Muslims who maintained a commercial monopoly. To protect the commercial interests of the newly arrived Portuguese, King Manuel I consigned a viceroy to command in India over a three-year term. The first viceroy, Dom Francisco de Almeida, arrived in 1505. On the directive of the king, he extended the hand of friendship to the kings of Cochin and Cananor, but was watchful of Calicut, where the “Moors” dominated. Throughout the sixteenth century the Portuguese spread their trading posts to the north along the coast, gaining control over Mumbai, Chaul, and some of the nearby islands—all the while fortifying their coastal positions and intensifying commercial trade (fig. 8.2). At the same time, however, the Mughals were extending their political and military dominance. The five influential emperors of the time—Babur (1507–30), Humayun (1530–56), Akbar (1556–1605), Jahangir (1605–27), and Shah Jahan (1627–57)—successfully extended the empire with the conquest of Gujarat (1572–73), Bengal (1574–76), up to Kashmir in the north, to the Gulf of Bengal in the east, and south to the Deccan.

Though the Portuguese remained mostly along the western coast and the Mughals in the north, their contacts increased when the latter reached the Gujarat region. Subsequently, a curious symbiotic relationship between Goan and Mughal rulers was stimulated by trade, which facilitated the exchange of ideas and artistic influences. It must be stressed that the Portuguese were the first Europeans to be in direct contact with the Mughal emperors; in fact, throughout the sixteenth and first half of the seventeenth century they jealously maintained that privileged relationship. Any European person wanting to come to India had to pass through Lisbon and set sail on a ship under Portuguese royal patronage. In essence, from around 1530 to 1670 the relationship between Portugal and the Mughal cultures was a privileged *in loco* one, intensified.
after 1572. At that point began a lengthy process of mutual cultural, artistic, and political influence, which was heightened by the flourishing of trade.

Goa and Diu at the Time of the Great Mughal

For us today, the Portuguese vision of the Mughal Empire during the sixteenth century largely derives from Jesuit documents issued during successive missions that described the court of the Great Mughal, later embellished by official sixteenth-century Portuguese chroniclers such as Diogo do Couto and Gaspar Correia. Some recently published sources add much to our understanding of these significant Portuguese and Mughal cultural encounters. The “race to reach the empire’s treasures” also attracted seventeenth-century traders and explorers from England, France, and Holland who added important insights about India.

Jorge Flores, an international scholar on sixteenth-century Indian-Portuguese relations, has provided a detailed analysis of the third mission led by Jeronimo Xavier, who spent twenty years at the heart of the Mughal court. In his *Tratado* (1610), Xavier detailed the daily routines of Akbar’s family and provided some insights about his own belief system—thereby adding much to the way we perceive this encounter and the cultural consequences. Importantly, Akbar exhibited astonishing spiritual and cultural generosity as he enlarged his empire with a syncretic strategy, not forcing any religion into the conquered new areas—quite the opposite, in fact. He demonstrated surprising interest in other religions and cultures, and encouraged interfaith debates among religious leaders and scholars. For example, although the Jesuits had already built a chapel in Delhi, they were given permission to install a new one in Sikri (now Fatehpur Sikri).

From this tolerant religious atmosphere, and based on the artistic output yielded by this encounter, Gauvin Bailey views this moment as a unique artistic exchange in history: “The Mughal emperor’s artists gave visual expression to one of the most intriguing and sophisticated cultural exchanges in the history of Christian-Muslim relations. Drawing on ideas and attitudes expressed at a remarkable series of interfaith debates, . . . these illustrate the high level of interest and curiosity that enlivened the dialogue between the Mughals and the Portuguese.”

The Portuguese viceroy who built gardens in Portugal after their return from India also enriched the historical literature. Viceroy Dom João de Castro (in office 1545–48), the builder of Penha Verde, wrote and illustrated a seminal book about the Indian coast from Goa to Diu. He described with evident awe the Elephanta temple near Bombay and brought back to his garden near Lisbon two stones inscribed with Sanskrit text and old manuscripts, confirming his appreciation for Indian culture.

Historical records document the presence of Portuguese architects in India from 1506, as evidenced by churches and fortresses in Cochim, Goa, Bombay, Daman, Bassein, and Diu. In addition, early experts in hydrology provided subterranean water to convents and fortresses (e.g., Tomás Fernandes), applying technical knowledge that would also be significant for garden-making. A Portuguese medical doctor, Garcia de Orta, who was summoned from Goa to cure Indian princes, published the first European botanical treatise on Indian flora in 1568. He was also in contact with Dom João Castro, who is known to have imported the first sweet orange tree and other “exotics” to Penha Verde, his garden in Portugal.

Portuguese archives record the presence of many noblemen in India who went in search of fortune but left their mark militarily, administratively, and spiritually. The
Mascarenhas family is an example of a permanent presence in India, beginning in the early sixteenth century. Dom Pedro Mascarenhas negotiated and stabilized Portugal's involvement in the East by securing the support of the pope in Rome for the Jesuit campaign to Christianize India. Dom Pedro was appointed viceroy in 1554–55, and subsequent generations of the family continued to influence the region. Important for this work is Dom Filipe de Mascarenhas, the enormously wealthy count of Conculim and Verodá, who facilitated the creation of Fronteira Garden in 1668 for his descendants. This Portuguese garden fully embraces the garden-making traditions of India, as evidenced by its luxury, water ornaments, pavilions, and decoration. Indeed, Fronteira could only have been achieved because of the Indian experience and wealth accumulated throughout five generations of the Mascarenhas family.

The confluence of Hindu and Portuguese artistic expression in the Goan region is well represented in its regional architecture. Goa palaces and noblemen's houses—which Ramponi, Pyrard della Valle, and Linschoten all praised—have a Portuguese architectural basis but were adapted to India, as described by Carlos Azevedo, an art historian who studied the palaces of Portugal and those of Renaissance Goa. Many other historical and contemporary sources have described a wide breadth of cross-cultural artistic influences, confirming that the Mughals enthusiastically received paintings based on Italian models from the 1580s. Portuguese brocades were also in demand around 1530.

During Akbar's reign, the Mughal/Portuguese fusion became evident in jewelry and furniture. Documents refer to the presence of Goa goldsmiths working in Lahore and producing Portuguese-style jewelry for Akbar, who specifically asked the viceroy in Goa to send craftsmen "who desire to visit our royal court." Additionally, beds, chairs, and small wooden cabinets with drawers, known as contadores da India, were purposely made to respond to the Goa demand for furniture. Pyrard de Laval reported that two times each year convoys of hundreds of ships would carry to Goa from Cambay and Surat beds, chairs, footstools, desks with mother-of-pearl and ivory marquetry set with gold, silver and stones, and smaller cabinets and caskets of tortoiseshell. These historical facts offer ample evidence that Portuguese noblemen, traders, priests, artists, and architects were in contact with Mughal rulers, many of whom enriched artistic exchanges of the type described above.

The Mughal Gardens Built from 1500 Until the End of Shah Jahan's Reign (1657)

Although the Portuguese-Mughal cultural connections are apparent in many artistic areas, the subject of the cultural fusion that influenced the creation of gardens remains largely untouched. Given that Mughal artistic expression can be seen mostly through its incredible garden-making tradition, a thorough investigation of this topic is long overdue. Babur's military conquests were expressed through architecture, in particular the introduction of Timurid Persian tradition by building gardens in newly conquered lands. This period of Mughal garden-building was, according to Elizabeth Moynihan, the most creative in Mughal history; among the emperors during this time, "Babur and ... Jahangir were the most ardent nature lovers and the most prolific garden builders." Babur's gardens, though few have survived, were seminal in introducing a new form of artistic expression in India. Indeed, garden-building in the Persian tradition encapsulates the whole artistic world of the Mughal Indian craftsman and builder. The Bagh-i Nilufar at Dholpur (1527–29) and the Bagh-i Hasht
Behesht, located on the opposite bank of the Yamuna River in front of the Taj Mahal, were architectural innovations of Babur’s time, enduring as important symbols of the Mughal Empire. These examples inaugurated in India the geometric Timurid-Persian scheme of walled-in garden subdivided into four quarters by raised walkways (khiyaban) with inlaid canals (nahr). They served as the model for the walled gardens built by other noblemen. According to Babur’s chronicler, Zayn Khan, the court followed his example by building gardens along the Yamuna, which were essential for all social functions, from public to private.

During the reign of Humayun, the octagonal plan for noble tombs was introduced in Delhi. Ebba Koch writes that when “combined with Mughalized elevations, this plan became a standard formula for small mausoleums and garden pavilions.” Such pavilions followed the composition of Mughal gardens in that they resemble parts of an expanded palace wherein the pavilions, which are located at symmetrical points of the garden plan, come to be used as important rooms of the palace complex. This represents a completely different composition from what was being built in Europe at that period; even Villa Lante (c. 1580), with two symmetrical pavilions on either side of the garden axis, was unusual for its time and place.

During the long reign of Akbar (1556–1605), garden architecture flourished and became more eclectic, innovative, and monumental. Akbar’s first major architectural statement is his father’s tomb in Delhi, built in 1560 and now restored to its original splendor by the Agha Khan Foundation. Humayun’s Tomb features the introduction of a major change: a garden within a 360-meter-square layout, with the tomb pavilion in the center surrounded by four char bagh and following perfect fourfold geometry.

At Purana Qila in Delhi, Akbar completed his father’s attempt to build a pavilion, the Sher Mandal, which is a two-story Timurid-style pavilion known as Humayan’s library. Its octagonal plan, culminating with the dome, remains an example of the architectural fusion that was to develop during Akbar’s reign and continue under his successors. According to George Mitchell, the Sher Mandal follows the Islamic architecture of the Delhi Sultanate in that it was originally clad in ceramic tiles. This material could also be found on the interior walls of the lower chamber, while the upper-level walls featured a revetment of incised and painted plasterwork.
Akbar’s most complete work can be seen in the city of Fatehpur Sikri, created in 1570. This entirely new city was to become the stage for a most unexpected confluence of cultures, since the emperor’s goal was to establish a cultural center where learned men of all creeds could discuss the essence of their different religions. By 1580, the Jesuit clergy men called to Fatehpur Sikri by Akbar, along with other Portuguese, would have seen the white marble-domed tomb of Shaikh Salim Chishti nearing completion, as well as the audience pavilion known as Diwan-i Amm (1570) and its fourfold garden. During the reign of Jahangir (1605–27), the expansion of the empire reached the far north of the Kashmir region. Here, the backdrop of the Himalayas, which delivered an abundance of water, became a stimulus for a significant expansion of garden design, as notably seen in Shalimar Bagh (1620) (fig. 8.3). Though the same geometric plan seen in Agra and Delhi was implemented at Shalimar Bagh, the abundance of water stimulated the expansion of the canals (nahr) to four to five meters wide and facilitated the creation of a descending garden axis falling to a lower-level terrace with splendid incorporations of water and light overlooking Lake Dal. Koch suggests that this garden was the pioneer design for a whole wave of other garden designs.

During Shah Jahan’s reign architecture flourished, inspiring noblemen to build palaces often used by the emperor: “Not only the sponsoring but also the designing of buildings appear to have become a regular fashion at court” during this era of great architectural achievement. The tomb of Jahangir in Lahore (1628–38) was Shah Jahan’s first major work, but he is remembered most for creating the Taj Mahal (1632–43), an impressive mausoleum garden and marble tomb achieved by a large team of architects and engineers led by the emperor himself. Also important to note is the Tomb of Asuf Khan in Lahore, built in 1641, which is a stand-alone pavilion with a dome supported by an octagonal building with deep arched niches and built on a plinth as a mausoleum prototype.

In Rajasthan in northwestern India, Akbar built his Ajmer Palace in 1570. Later the flat-roofed marble pavilions were part of the “pleasure house” program Shah Jahan started in 1636, which included hunting pavilions like those in Bari and Rup Bas. The Agra Fort, rebuilt between 1628 and 1637, is the first Shah Jahan palace with three courtyards and pavilions facing the Yamuna River; it also features a periphery carved pool in marble, with spouts of water creating a fresh atmosphere under the arched recesses of the pavilions with a view to the river.

In Kashmir, the hydraulic expertise of “gentleman-architect” Asaf Khan helped to significantly advance water use in gardens, culminating with the building of a monumental twelve-terrace water garden, the Nishat Bagh. Shah Jahan’s architect also contributed to Shalimar Bagh in 1634 with the creation of a central “pavilion standing in pool with fountains.” Shah Jahan’s enormous building program—no doubt intended to display his incredible power and wealth, as well established by Bailey—is perhaps best seen in Bagh-i Jahanara, one of the most splendid garden palaces of Agra. Indeed, it is considered by many to be Shah Jahan’s finest garden and an indication of the priority of gardens in the life of this builder-statesman.

Comparative Garden Analysis: Portugal and India in the Sixteenth and Seventeenth Centuries

The gardens of the Mughal emperors served as models for Portuguese gardens, which became obvious symbols of wealth and status. The garden as a comfortable and enjoyable location in hot climates, but also as a statement...
of political power and high status, gradually came to be viewed as an indispensable complement to mausoleums, hunting pavilions, and palaces, creating an impressive and evocative setting for ambassadors and travelers as well as the emperor’s own court. In translating Eastern influences, the Portuguese absorbed both Hindu and Mughal traditions. Indeed, according to experts on Mughal garden architecture, it is clear that one must differentiate between the Hindu/sultanate influence and the design techniques of Mughal garden builders. When the Portuguese arrived in India in 1500, only the former existed to be admired, described, or copied. However, by the 1660s, when Fronteira Garden was created, Mughal garden-building and architecture had excelled to such a degree (e.g., witness the Taj Mahal) that they came to represent political power.

According to Carlos Azevedo, Portuguese architects were dominated by architectural style emanating from Italy, which they fused with Hindu and later Mughal elements. The same fusion can be witnessed in Portugal’s new garden features, which were unknown in other parts of Europe. Later in the seventeenth century, novel Mughal artistic elements stemming from expanded contacts in the Diu/Gujarat region were absorbed into existing garden design, creating a style in Lisbon associated with the gardens of the viceroys who pioneered this new approach. This style was copied in many other places in the country without any real awareness of its design origins.

Indian Water Design and Mughal Garden Models

Reflecting the arid climate of the region, many Indian garden elements were created to capture the monsoon rains and contain that water for the long dry season to come. The same need for irrigation solutions during the dry season was also an imperative in and around Lisbon. Essential to Hindu temples and their associated rituals are large geometric pools that can be viewed as both water reserves and symbolic means of purification. These were in place long before Mughal water design began to exert its influence. Anthony Welsh reminds us of the significance of gardens for the pre-Mughal rulers, who built and repaired baolis and emphasized the strategic use of water for garden-making. “Indigenous Indian construction techniques and hydraulic technology [were kept] intact . . . [tanks] were designed not only to preserve water but also often to provide cool and secluded retreats.” He also maintains that while gardens were places to honor the dead and perpetuate their memory, they were also designed and built to demonstrate sovereignty.

Portuguese people in and around Goa must certainly have witnessed the use of these baolis, described by Marie Luise Gothein, along with Hindu temples and sacred lake architecture. The baolis, which featured steps leading to the water level, could be very deep since they were also used for bathing. This type of architecture demonstrated considerable know-how and “produced Indian architects, who were masters of monumental stairways.” These architectural lakes could be reached at various levels; oftentimes the stairs ended in galleries, behind which arcades were built, creating restorative refuges. In Jodphur, located at the edge of a desert, water was a precious element. Its Abhaneri step well, a magnificent baoli, is composed of many levels of recessed pavilions—quarried nearly twenty meters downwards and resembling an “upside down palace.” The large geometric lakes and their cool recessed pavilions associated with Hindu culture seem to have played a role in daily Portuguese life in India, as witnessed in sixteenth-century Indian paintings of Portuguese families and descriptions...
of Portuguese gardens in Goa. Later, these waterside pavilions appeared in four of the five viceroy gardens around Lisbon.

The essential design element of the Mughal garden—the fourfold char-bagh garden introduced to India by Babur—was used in the period under study during the time when the five Mughal emperors ruled. This symmetrical geometric feature and the complementary canals appear in most Mughal gardens, which by and large were constructed on flat surfaces. This technical requirement, also essential for the viceroy gardens described here, was more difficult to achieve in Portugal given the topography. Thus, canals were built along retaining walls. Flat surfaces eventually evolved into real terraces (martabas) that allowed one to contemplate distant views from the garden. Indeed, the martaba appears to have been an important composition element since Babur’s time (e.g., Akbar’s Garden in Agra and the Dal Lake gardens).

Gharipour describes the detached freestanding pavilions in Mughal gardens, a multipurpose essential element that originated in Persia, as the “intersections of three restorative environments; built, natural and social. Historical accounts reveal that most pavilions were used for social gatherings, parties, and official meetings. The inhabitants of the structure not only pleased themselves by being part of nature, but also used them as settings for the pleasure of interacting with other people.” The multiple uses of pavilions imbued the garden with new and “revolutionizing” structures that completely changed its purpose. Pavilions were located in detached positions at the end or the center of the geometric axis. As such, they became strong visual reference points emphasized by plinths that supported them and crowned by impressive domes that linked them to their Persian antecedents. Later, we will see how the Portuguese adapted these pavilions in their own European gardens. Elevated walkways complemented the geometry and linked the pavilions. Most striking, however, are the water features—although little has yet been published about the supply, storage, and distribution of water in famous Mughal gardens.

The most prominent water features were the large reflecting pools that marked the axis and reflected the pavilions. The borders of the pools tended to be quite elaborate, with carved stone edges mimicking the surface of the water. The source of canal water differed from place to place. For instance, the water for the gardens along the Yamuna River’s banks in Agra was generated by an animal-powered system. In Lahore and Kashmir, qanats were used to supply garden water by gravity. These subterranean canals were designed to collect the underground water and fill reservoirs—a hydraulic technique borrowed from the Islamic world and later found in three of the viceroy gardens around Lisbon.

Decorative elements played an important role in the Indian garden pavilions. Sophisticated stone-carved surfaces and ceramic elements, many in vibrant blue tones, adorned the walls of pavilions and entrances. Painting was also a frequent medium, often accented by bits of broken glass or mirrors to cover the inside of pavilion domes. Plaster geometric elements and marble inlays were later incorporated as the century advanced and new influences became fused into Mughal garden art and techniques. Except for some rare imported Italian panels, most figurative motifs were limited to stylized vegetation elements or inscriptions from the Qur’an as ornamentation around entrance doors. Gardens with multiple pavilions were typical of palace complexes of the time. Their function, as Gharipour states, was to serve as “the backdrop for various political and cultural events, confirming the centrality of gardens in society.”
James Wescoat and Joachim Wolschke-Bulmahn identify six major functional themes in Mughal gardens, three of which apply to this comparative analysis of Portuguese gardens: political symbolism, courtly function, and environmental function. As indicated, viceroys were empowered by the king to play a political role for which they wished to be remembered when they returned to Portugal. Gardens represented the perfect symbol of wealth and accomplishment that would ensure their place in history. According to Wescoat and Wolschke-Bulmahn, “Palace-gardens served as the working political environment of the king. Each level of the garden . . . had political significance. . . . Gardens served as political ‘markers’ in the territories they occupied.” In essence, the garden served as the ultimate power statement for viceroys who had returned to Portugal. Additionally, gardens demonstrated good taste and functioned as repositories for collected memories of India. As in Hindu tradition, Portuguese garden pavilions were used as courtly mausoleums to celebrate the brave men who had served their country and amassed great fortunes in exotic faraway India.

The environmental function is of utmost importance, as the search for comfort in very hot climates led to design innovations similar to those that had been implemented in India, especially in the form of shaded pavilions near the water and a reliable supply of water in dry months. These essential imports from the East eventually were successfully copied around Lisbon to cope with the local climate. A “water design” tradition became the basis for an intense outdoor use, which was facilitated in part by the development of arched open structures—similar to pavilions—adjacent to the water surface. In short, India’s well-developed response to environmental conditions was easily adapted to Portuguese garden design.

Hindu and Mughal Garden Elements in Portuguese Gardens

The tantalizing possibility of accumulating wealth through trade with India attracted not only adventurous traders but other educated Portuguese noblemen. From the early sixteenth century, these men established their families in India and intermingled with Hindus through marriage, religion, and trade. This multifaceted amalgamation was a consequence of facing a much more sophisticated and resilient social environment than had been encountered in Africa or America. The result was the development of a fruitful, symbiotic relationship and the opportunity for untold financial gain. Not surprisingly, many noble Portuguese families have relatives buried in Goa’s churches; moreover, the carved stone coats of arms on the church floors are remnants of Portuguese investment and the families’ attraction to and fascination with India. The ensuing wealth that poured into Portugal resulted in the building of palaces, lodges, and gardens—many of them sadly lost in the Lisbon earthquake of 1755. The surviving viceroy gardens from this period are located in the Sintra and Azeitão areas around Lisbon and were mercifully spared. My survey more than twenty years ago of four of these viceroy gardens considered their history, influences, and spatial elements, and was later completed with the addition of the Nuncio Garden, built on an old convent estate belonging to the crown.

This investigation was inspired by M. Luise Gothein and her seminal book *A History of Garden Art* (1913), which is a methodical investigation of the sixteenth-century Portuguese palaces and gardens she visited. For example, she makes note of a type of large tank, cistern, or pool located in the gardens of these palaces, which had no equal in Mediterranean countries at that time. Referring to the Bacalhoa Garden, she states, “the whole place, cistern and...
8.4 Penha Verde Garden chapel with doorway inscription, c. 1541.
house alike, has no predecessor similar to it either in Spain or Italy.” At Fronteira she comments, “here too, however, the eye is arrested by something new and strange, a basin [away from the building], which occupies nearly the whole length of the garden.” This unique use of water (i.e., a large pool independent from the building and reflecting important vertical façades) also intrigued Peter Coats, who addressed its origins at Fronteira: “to the right of this formal garden... lies the sensational feature of Fronteira, a tank: and the word is well chosen because it is thus that garden pools are called in India and the tank at Fronteira strongly recalls the East.”

These insights from Gothein and Coats were the main stimuli for my research corroborating the Indian influence on Portuguese Renaissance gardens. The following descriptions of the five Portuguese gardens focus on the garden elements that formally provide evidence of this Eastern influence. Two distinct periods clearly play a role: the early influence of Hindu “water design” and mausoleum traditions, and, from the 1550s on, an adaptation of Mughal garden design to Portuguese sixteenth-century landscape conditions.

Quinta da Penha Verde in Sintra (c. 1540)

The Penha Verde Garden was built for the admiral and Indian viceroy D. João de Castro, a well-educated, courtly man who created a maritime survey in 1538 describing and illustrating the Indian sea route, which he himself used twice to sail to India. On his first return home, he commissioned the Penha Verde Garden in Sintra, where a surprising display of Hindu stones brought from India featuring Sanskrit inscriptions still exists. A circular chapel with two detached standing columns expresses his gratitude for having returned safely. The chapel doorway includes a stone where de Castro engraved his curriculum vitae in Latin; this can be linked directly to the Qur’an-inspired carved doorways in Hindu mausoleums and pavilions. This inscription, and his explicit instructions that he be buried in the Penha Verde Garden, is striking because that had never been done in Portugal. Later de Castro returned to India as a viceroy, and sadly died in Goa in 1545, never seeing his completed garden. But he had introduced in Penha Verde the idea of a commemorative space (later followed in Bacalhoa and Fronteira), as well as the novelty of a belvedere overlooking the valley and the ocean from a dominant point. The introduction of far-reaching views as part of the garden design can be compared to the Villa Medici at Castello (1537), where openness to the surrounding countryside is a Renaissance innovation.

Before 1538, when de Castro first visited India, Babur had conquered Delhi (1526), and his gardens in Dholpur and Agra were just being built. In Delhi in the 1530s and 1540s, octagonal tombs had been built (e.g., Sabz Burj and the Nila Gumbad), which according to Koch belong to the new category of tombs reflecting Babur’s Timurid influence, where pavilions within an enclosure celebrated an important man of court. Such structures were probably known among the Portuguese in Goa and Diu, where D. João de Castro stayed for long periods of time. It is also known that he explored the Hindu rock-cut temples near Bombay with awe and admiration, reporting about the wonderful sculptures and the geometry of the space. De Castro was also the first to explore and describe the Elephanta temple.

Penha Verde is the first Portuguese viceroy garden that celebrates the contact of East and West through the import of design elements from India. Importantly, it also ushered in the novel idea that the garden could become a mausoleum for the owner, with a circular chapel instead of an octagonal pavilion, while at the same time perpetuating his life with inscriptions in the doorway and stone “souvenirs” from his heroic Indian adventures.
8.5 Watercolor of Elephanta Temple, visited and praised by D. João de Castro.
Quinta da Bacalhoa-Azeitão (1532–1554)

The second viceroy garden that clearly embraces its Indian heritage is Bacalhoa, which mirrors Penha Verde in celebrating a hero of the realm. In this instance, however, the viceroy Afonso de Albuquerque was dead before the garden was conceived. His son, Brás, spearheaded the design, having been given power, money, and status for his father’s services to the crown. Brás also created in Azeitão a “mausoleum” garden with pavilions and a large pool (fig. 8.6), which, according to the entrance stone, dates from 1554, but has tiles in the pavilion that date to 1532. By the time relations between Mughal and Portuguese India were established, Babur’s and Humayun’s mosques, mausoleums, and gardens were already well established as prominent displays of power.

It is important to note that Brás had also traveled to Italy in 1524 and to Charles V’s Spain (1526), accompanying Princess Isabel to Granada for her wedding to the emperor. The resulting Italian and Spanish Muslim influences have also been studied in connection with Brás’s architectural vision for Bacalhoa. Specifically, his likely visits to Medici villas and to the Islamic masterpiece the Alhambra in
Granada were described by both Rasteiro\(^8\) and Azevedo in connection with Bacalhoa. Moreover, sculpted medallions like those of Piazza Santissima Annunziata in Florence can be found on the entrances to the western and northern porticoes. In fact, Azevedo noted the primacy of Bacalhoa as the first Renaissance palace in Portugal permeated with Islamic touches.\(^8\) If this is true of palace architecture, the same cannot be said for the design of the garden and pavilions, where the Indian influence is manifest. The garden’s geometric composition using terraces, the large square lake and pavilion, the decorative geometric stripes of colorful *azulejos*, the raised walkways with irrigation canals, and the detached pavilions all lack a European precedent. Instead, they can all be related to Indian solutions and ornamentation.

In terms of its composition, the geometric rectangle of the Bacalhoa Garden (fig. 8.7) is an innovation that can easily be associated with Mughal garden layout. Prior to that time Portuguese gardens had irregular borders and did not feature flat terraced grounds slightly sloped for water runoff in canals. The source of inspiration is no doubt Mughal,\(^8\) as is also evidenced by Bacalhoa’s detached pavilions (the Indian Pavilion and the Doves Pavilion), which were built at symmetrical locations along the outer wall. The Lake Pavilion, cooled by its proximity to water (like the *baolis*), is asymmetrically located—similar to Ram Bagh (the earliest surviving Mughal garden of Agra), which according to Koch was laid out on the foundation of an even older garden built by Babur (c. 1530).

The decorations of the garden water pavilions with their geometric ceramic tiles (*azulejos*, a Portuguese word descending from the Arab tradition) also recall the Indian glazed ceramic decoration tradition. Along the wall that supplies water to the lake, two stripes of *azulejos* strongly recall the Agra Fort’s decorated walls and many other built
structures in India thus ornamented. From descriptions and remnant broken parts, I have made a reconstruction drawing of the peripheral wall of Bacalhoa Garden that shows regularly interspersed pyramid shapes and spheres topping a raised walk with seats covered with azulejos. This walk links the palace to the Lake Pavilion and overlooks the orange grove below. The large square lake (tanque in Portuguese), the arched pavilion, the ceramic bluish tiles, and Bacalhoa’s pavilions inspired Marie-Luise Gothein to write that “the whole place, cistern and house alike, has no predecessor similar to it either in Spain or Italy.” This “water design” geometry, the use of detached pavilions, and the azulejos appearing for the first time all show that Bacalhoa is a pioneer in the history of Portuguese garden art, with features that would be replicated in many future garden designs. Others were copied only in gardens of the same period, such as the spheres topping its walls, which did not reappear in any other of the five gardens studied here, except for the Nuncio Garden in the Quinta de Penha Longa.

Jardim do Núncio—Penha Longa, Sintra (1552)

Unlike the two gardens already described, the Nuncio Garden in the Quinta de Penha Longa did not belong to a viceroy; instead, it was a medieval royal estate with a convent, palace, and gardens. Of interest to this analysis is its detached garden, which was built in 1552 during King D. João III’s reign. It became known as the Nuncio Garden because it was used by Nuncio Pompeo Zambeccario, who was sent to Portugal by the pope. The Nuncio Garden is a small high-walled space far away from the main building; its square layout is limited by four walls, and the geometric composition is enhanced by a large pool in its central surface. Water is collected from a rivulet that feeds the pond and fountain and supplies the hydraulic system. The spatial composition, the water features, and some decorative elements strongly suggest the lakes in India near the Hindu temples, which are surrounded by walls and present niches and arches around the water surface (fig. 8.8). Such lakes are known as tanques in Portuguese—and, like their inspiration in India, were more than just reflecting pools because, like step wells, they also offered a fresh haven near the water under the arched pavilions.

The inside walls of this garden were covered by azulejos and four fountains embedded in wall niches, which followed a symmetry on each side of the lake. The southern axial point was marked by a domed pavilion richly decorated with frescoes and azulejos that have since disappeared, with niches and a fountain with a lion head decorating this pavilion.

As noted above, a recurrent element seems to tie the Nuncio and Bacalhoa gardens together: spheres that top the crenellations. This peculiar early garden design may have been a commission that followed Bacalhoa’s lines as a new way of making geometric gardens with water, pavilions and azulejos, and decorated outer walls. It is also possible, however, that the architect responsible for Bacalhoa may have been called to design the Nuncio Garden by the king, who wanted to have the same innovative space as one of his noblemen.

Quinta das Torres in Azeitão, D. Diogo d’Eça (c. 1570)

Located in Azeitão and quite near Bacalhoa’s garden is Quinta das Torres (c. 1570), the first garden where Mughal influence became fully evident. Although not owned by a viceroy, Quinta das Torres was commissioned by a noble family known as Eça, who had contacts with India. Through the course of the sixteenth century, the increasing influence of Mughal garden art on these Portuguese gardens becomes
8.8 Nuncio Garden with pond at Quinta Penha Verde in Sintra, built in 1560.
evident. Here, the main garden feature is the large square lake with a central stone pavilion standing on an island (fig. 8.9). All along the northern façade a square lake was built in a terrace that flattens the slope of the hill. In the center of the lake and totally surrounded by water stands a detached domed stone pavilion. This pavilion can be considered the singular distinctive feature that associates it directly with Mughal garden pavilions—principally Akbar’s Diwan-i Amm in the Agra Fort and the Udaipur Gardens of Jahangir’s period as a young man before he came to the throne. Built by Emperor Jahangir, this garden has a square basin, “and in the centre there is a small marble pavilion for the musicians.”

Consider also the Nagaur Fort in Rajastan, where a stone pavilion occupies the center of a very large square pool (fig. 8.10). When the pool is full, the “floating” stone pavilion surprises the viewer with its reflection in the water. The innovative builders of the Torres pavilion must have drawn on these antecedents when they created the lake with its central pavilion that seemingly floats on the surface.

Although the Italian influence we see in Bacalhoa is also evident in the Quinta das Torres palace—in fact, experts write of its proportions and architecture being based on Serlian principles—the fundamental garden design featuring a large lake with a central pavilion has
8.10 Pavilion at Baradori Square, Nagra Fort, Rajastan, under Mughal rule since 1556.
no precedent in Spain or Italy. This water composition is strongly Mughal in inspiration and should not be confused with generic Islamic influence. Torres’s large lake and central pavilion cannot be found in similar pool architecture in Italy, which until the 1550s remained mostly utilitarian, as can be seen in Palazzo del Té in Mantova (c. 1535)90 or the Villa Medici (c. 1537) in Castello near Florence.91 Even the more contemporaneous example of a central pavilion and lake at Giardino delle Stalle does not resemble the floating detached pavilion in Torres.93 In summary, the Torres Garden—principally its lake and pavilion water design—well illustrates the fusion that occurred in Portuguese Renaissance garden-making. While the pavilion lines are of obvious Italianate ornamental origin, the lake and its isolated stone pavilion clearly speak to their Indian Mughal beginnings.

Quinta dos Marqueses de Fronteira Garden in Lisbon (1660–1668)

The last Mughal-inspired garden found in Lisbon is credited to Dom João de Mascarenhas, the marquis of Fronteira, who created his Fronteira Garden sometime around 1660. Mascarenhas, from a family who had enjoyed a close relationship with India, returned with the title of count of Concúlim and Verona (Indian territories) and with a considerable fortune. At the same time in India, Shah Jahan’s reign had just ended, leaving for posterity a wealth of gardens and palaces such as the remarkable Taj Mahal. Indeed, it seems clear, based on Fronteira’s waterworks, the double fourfold layout of the garden, coupled with the details of the pool’s carved stones, that either the garden builder himself or the individual who commissioned it might have visited the Taj Mahal.

Although it postdates the other four gardens by a century, Fronteira’s builders intentionally evoked earlier forms and styles that had characterized Portuguese landscape architecture before the country’s annexation by Spain in 1580. In this garden we see elements such as the large pool with a vertical arcade, which appeared for the first time in the Bacalhoa Garden but here is transformed into a larger and more complex waterworks. Also evident at Fronteira is a much stronger Mughal influence, in its exotic decorations, domed pavilion adornment, and tile-covered garden walls, which captured the attention of visitors, including Cosimo III de Medici’s friend Filippo Corsini, who wrote in 1668 of its strange ornamentation.94

Fronteira’s most striking composition is a flat terrace artificially built on a sloped hill. To create this terrace, a retaining wall had to be erected that was later used for the arcades lining the pool’s longest side. This terrace is divided into four units and then subdivided again into four, respecting the symmetrical geometry of flat terraced surfaces (fig. 8.11) such as Shalimar Bagh. The incorporation of multiple vistas was also an important composition element in Fronteira, similar to the noblemen’s pavilions at Agra along the Yamuna River. The built structures in Fronteira, such as the domed freestanding pavilion built on a plinth from where the water descends, also evoke certain aspects of those in Mughal gardens, but with a characteristic twist. In Fronteira we find a peculiar interpretation of this garden element, known as the Casa de Fresco or Casa da Água (cool house or water house), which is a circular building with a dome covered by azulejos (fig. 8.12). A complex water system, recently restored,95 spouts water from a central square table and from niches in stone-carved basins.

This pavilion was built on a plinth that allows water to run down into a front basin known as the “double-S” lake, so called because its top stone revetment spirals like two symmetrical letter S’s. It is here that we find the ornamental carved pool that also originated from India, but with an additional feature: four spouts at the final point of each of
8.11 Plan of Fronteira's double-fourfold terrace, with Knights' Pond.

8.12 Fronteira's water pavilion, with azulejos-covered dome and double-S lake with carved stone border.
8.13 a–b The spiral carved stone in Fronteira’s double-S lake and in the Taj Mahal western lake.
the spiral-shaped stone—just like those in Taj Mahal’s western pool or those in the Agra Fort courtyard pool (fig. 8.13).

The Tanque dos Cavaleiros (Knights’ Pond) is a large reflecting pool fifty meters by twenty-eight meters in size—“the sensational feature of Fronteira,” as Peter Coats termed it. Its similarity to large pools in Mughal gardens is offset by an Italianate balustrade and two Baroque-styled statues in the water, which when viewed together confuse the comparison. Figurative azulejos cover twelve of the fifteen vertical arched walls, where three of them are shaded recesses, as we saw in Indian step wells.

Unlike Mughal gardens, Fronteira’s pavements have no embedded canals; in contrast, long subterranean canals (minas) that cut through the upper part of the property feed water into the various lakes and pools, reminding us of the water supply system of kanats in the gardens of Kashmir (fig. 8.14). If we compare the grandeur and ornamentation of Mughal gardens with the ornaments of Fronteira, the analogy is less evident. However, a deeper analysis reveals not only stone-carved water surfaces, but also the dome’s interior revetment of the cool house (fig. 8.15a), which introduced into Portugal a new “invention” called embrechados, which parallel Mughal domed pavilions (fig. 8.15b). These embrechados have circular geometric patterns that, similar to those found in India, employ stone, broken glass, and bits of mirror on their surfaces. In Portugal we also find broken pieces of porcelain. Another final effect is the dome’s outer revetment in azulejos. Fronteira Garden is thus a rich fusion of three cultural influences: Mughal garden design, ornamentation, and treatment of water; Italian Renaissance and Baroque architecture; and traditional mudéjar/Portuguese building techniques. Fronteira also brings to an end the truly remarkable synthesis of sixteenth- and seventeenth-century Indian and Portuguese influences in garden art.
the former three the influence is more nuanced. However, chronologically this difference makes sense, since Penha Verde, Bacalhoa, and Nuncio precede the grand age of Mughal architecture. Nonetheless, there is sufficient evidence in these gardens to demonstrate how Hindu water design, mixed with generic traditional Islamic influence, acquired a pronounced Indian flavor over the course of the sixteenth and seventeenth centuries.

One question still remains: how did Indian garden canons, composition, and ornamentation actually reach Portugal? Diccionário Historico e documental dos Architectos, engenheiros e construtores Portugueses, which is well documented from original sources by Sousa Viterbo (a prolific historian who compiled reliable information from original sources), records that during the period 1510–1650 sixteen architects, engineers, and contractors traveled to India to build and repair fortresses and churches and install hydraulic systems in forts. Some of them were highly recommended by viceroys for their excellent work, and four, in fact, are extensively reported in Viterbo's dictionary: Miguel de Arruda, Francisco Pires, Diogo de Torralva; and Tomás Fernandes, who was the first Portuguese architect working in India in 1506. These men (and no doubt others) certainly worked with, and learned from, local craftsmen.

In Goa we have the description of the Sabayo Palace (Viceroy's Palace) garden, a luxurious setting built by Portuguese architects. At the very least, natural curiosity would have impelled them to learn more about the many...
aspects of project design and implementation techniques—no doubt involving a thorough site analysis and possibly the creation of a design plan, something akin to a blueprint, as we see in Babur's _char bagh_ illustration. They may have been in awe of what they saw in Hindu and Mughal building traditions, as these represented novel, striking garden features and ornamentation of a refinement unseen in Europe. It is plausible to consider their tendency to adopt and adapt Indian building traditions, especially in garden design, where Portuguese vernacular know-how, with its Islamic heritage, was of primary importance for irrigation.

Since building knowledge was not a written tradition at that time, but handed down orally and by example, the Portuguese copies do not have the rigorous geometric discipline of the _char bagh_, the purity of the ceramic tiles, the hydraulic complexity of a hundred spouts in large canals, the cascades, or the sophisticated carved stone pools. In Portugal they represent an adaptation of the Indian style, while also incorporating Italian Renaissance style and perpetuating certain aspects of Islamic building techniques and decoration. Nevertheless, these five gardens were created to celebrate their owners, used a geometric layout, relied on an elaborate water system to create comfortable, fresh pavilions and irrigation canals, incorporated ceramic tiles to enrich surfaces, and featured large water surfaces—all of which betray their Indian origin.

The idea that _mudéjar_ influence could be the only source of Portuguese garden pools, _azulejos_, and waterside pavilions instead gives way to a more inclusive picture that emphasizes the importance of Indian influences in sixteenth- and seventeenth-century garden-making in Portugal. The perseverance of local, originally Moorish, traditions is known and accepted—but not typically as an artistic or cultural exchange between Portugal and the Moors from North Africa, who had been expelled or converted for “religious reasons.” Specifically, King Manuel's edict issued in 1496 was dogmatic in defending Catholicism against all infidels.

Nevertheless, a common Islamic origin must be acknowledged, since Persian gardens are the ancestors to both Mughal and Iberian Moorish gardens. Garden traditions had spread successfully to the East and West (fig. 8.2), and in their evolution and adaptation to new landscapes and cultures, Persia remained the common denominator. In the Iberian Peninsula, Spain's Islamic heritage remains evident in buildings and gardens; in contrast, Islamic influences in Portugal were perpetuated in vernacular architecture, agricultural practices, and the intense use of _azulejos_. Moreover, the success of the Mughal garden as a demonstration of power, serenity, good taste, and luxury no doubt impressed Portuguese noblemen who had been empowered to represent the king of Portugal in this faraway region. Specifically, for the builders at Fronteira the association between power and garden has been well demonstrated by Bailey through his analysis of the Taj Mahal as a statement of full Mughal control over India.

Also important to consider is the climatic similarity between Indian coastal areas and Lisbon and environs. This correspondence gave rise to innovative and artistic solutions for adapting to Lisbon's hot summers; though they were less humid, there was a permanent need for irrigation. Gharipour emphasizes these various aspects in discussing Persian gardens: “The Persian garden [was] . . . designed as an independent retreat . . . with a pleasant environment including shady areas, fountains and water channels, a pavilion, and a wall that separated it from the outside world. The form and function adopted [were] based on the climate and the needs of the owner.”

Just as paintings introduced by Jesuit missionaries influenced Mughal renderings, and similar to the way...
Islamic interpretations of Christian Bible images were transformed into Mughal illustrations, the new Portuguese garden-making tradition may have emerged from what had been seen in Mughal India, whether in person or as a drawing or verbal description. The viceroy gardens to this day showcase a marvelous fusion of pavilion forms, hydraulic techniques, ground sculpting, and decorative motifs imported and adapted to the Portuguese landscape and culture. Though each piece of evidence on its own may not be conclusive, when they are combined in historical context it becomes difficult to deny the powerful Indian influence on Portuguese Renaissance garden-making.104

Conclusions

Portugal’s artistic inheritance from India was facilitated by a peaceful period of 150 years, which saw what Bailey refers to as an “intriguing and sophisticated cultural exchange” between European and Hindu/Mughal culture, one never seen before or after. Frequent encounters between traders, artisans, clergy, noblemen, and the Mughal emperor himself created a terrain wherein artistry and craftsmanship could flourish. From the Portuguese-controlled areas of the Indian coast (Goa, Bassein, Daman, and Diu) and the Mughal areas of Agra, Gujarat, and Rajastan, travel was made easy by boat.105 As the Mughals settled in northern India and extended their conquests (without infringing on any Portuguese acquisitions) to Gujarat, the artistic and crafts trade involving paintings, furniture, ivory-carved objects, and jewelry became an important business, bringing together people of different cultures with the same interests.106 During this period, five successive Mughal emperors also developed an astonishing garden-making tradition based on a highly specialized hydraulic framework that is the foundation of their works of art. Although these five gardens are not wholly Mughal in inspiration, they show a definite progression in the way that Mughal-inspired elements were introduced in garden-making traditions in Renaissance Portugal. Notable too is that these gardens were developed to respond to often-harsh environmental conditions by providing a ready source of water and beautiful, peaceful locations for finding respite from the heat. It seems clear that this knowledge and associated building techniques were transported to Portugal and applied to the creation of exceptional gardens.

Finally, a crucial stimulus for building Mughal-inspired gardens in Portugal was certainly the notion of “garden as power.” With their impressive geometry, complex water canals, carved pools, balustrades, and walls, the Mughal rulers displayed their power and wealth to both their subjects and visiting Portuguese viceroys and noblemen. When their time in India had passed, these Lisbon nobles celebrated their own influence through the making of gardens. Transporting and adapting Indian/Mughal garden-making traditions to Portugal became a favored way to display and perpetuate their memories of exotic India, not to mention the power and personal fulfillment they had once enjoyed there.
NOTES

This article, which updates and synthesizes the original concept for my 1992 Ph.D. diss. presented at the University of Lisbon, is the product of several years of research carried out in many libraries around the world, including the collection at Harvard University’s Graduate School of Design, the Biblioteca Nacional and Biblioteca Fundação Calouste Gulbenkian in Lisbon, the Goa Public Library in India, and the Dumbarton Oaks Library in Washington, D.C. During the research period I benefited a great deal from the wisdom and insights of several teachers and friends: John Martin (University of Massachusetts), Hellmut Wohl (Boston University), Francisco Caldeira Cabral, and Fernando Mascarenhas (the marquis of Fronteira), to whom I am very thankful. More arguments were added to corroborate my original thesis work while I studied at the Goa Public Library in 2012. In that connection I am particularly thankful to Dra. Maria Lurdes Costa. I also extend my gratitude to Lady Helen Hamlyn, who suggested and encouraged my visit to Jodhpur, India. Importantly, she introduced me to Minashki Jain, who graciously provided a thorough visit of Nagaur Fort and its restored hydraulic system, and to Gerard da Cunha, in charge of the restoration of the Reis Magos Fort in Goa. First and foremost, however, I offer my appreciation to Anatole Tchikine, who suggested and helped to guide the development of this chapter under the insightful editorial direction of Mohammad Gharipour. I also benefited from the knowledgeable and critical feedback of John Beardsley, director of Garden and Landscape Studies at Dumbarton Oaks, as well as the editorial reviews of Laurie Good. Finally, I note that the research conducted at the Dumbarton Oaks Library in 2015 was made possible through a Garden and Landscape Studies Grant.


3. This garden was built on royal property during the reign of King John III; though not directly attributed to any Indian link, it follows the recent introduction Indian influence.


6. Emilio Rui Vilar, foreword to Flores and Silva, Goa and the Great Mughal, 7.

7. Flores and Silva, introduction to Goa and the Great Mughal, 10.

8. Susan Stronge, “‘The Land of ‘Mogor,’” in Flores and Silva, Goa and the Great Mughal, 134.


10. Carlos Azevedo, A arte de Goa, Damão e Diu, ed. Pedro Azevedo (Lisbon: Leiloeiro, 1992). 29–30. Azevedo was a twentieth-century art historian who studied in England, taught in the United States, and published a seminal work on Indian Portuguese architecture. He confirms that Diu’s wall repair after the 1546 attack was an innovation drawn up by Francisco Pires and followed the modern fortification plans influenced by Italian treaties.

11. While my Ph.D. dissertation, having been presented in 1992, was awaiting publication, a major research study on this subject was carried out by Nuno Vassallo e Silva and Jorge Flores for the exhibition Goa and the Great Mughal. The documented exchanges between the two cultures confirm my hypothesis of an artistic connection and a possible influence of Mughal culture on garden art in Portugal.

12. Flores and Silva, introduction to Goa and the Great Mughal, 11.

According to Jorge Flores, these two sultanates had enormous significance for Portuguese interests, and their pacification allowed relations between the two cultures to intensify.

13. Ibid. Gauvin Bailey reports that this period of opening to the “other” ended with Jahangir’s death in 1627. With the subsequent return to “more orthodox policies under Shahjahan and the increasing influence of Protestant nations with little interest in missionary work such as England and Holland, the Mughals and the European powers went back to a more traditional arms-length diplomacy until northern India was slowly swallowed up by the British empire. By then any hope of an equal exchange had passed forever.” Gauvin Bailey, “Between Religions: Christianity in a Muslim Empire,” in Flores and Silva, Goa and the Great Mughal, 161.


15. Such as Jerónimo Xavier and Manuel Godinho de Erédia. Perhaps because these documents are written in Portuguese, English-speaking authors have ignored them—although they complement the reports mentioned above.

16. Flores, “Two Portuguese Visions of Jahangir’s India: Jeronimo Xavier and Manuel Godinho de Erédia,” in Flores and Silva, Goa and the Great Mughal. 44–67, analyzes the Tratado da Corte e Caza de Jamguir pachá Rey dos Mogores (Treatise on the court and household of Jahangir Padshah king of the Mughals) (1610), with details:

On the Court of the Great Mughal,
On the Children and Kin of this King, . . .
On the King’s Wives, . . . and on the Riches of their Garments, . . .

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[On the] Expenses with the Animals, and Other Things Pertaining to the Service of this King, . . .

On the Kingdoms this King Possesses


17. Elizabeth B. Moynihan, Paradise as a Garden in Persian and Mughal India (New York: George Braziller, 1979), 116.


22. Sousa Viterbo, Dicionário Histórico e documental dos Arquitectos, engenheiros e construtores Portugueses, 3 vols. (Lisbon: Imprensa Nacional, 1922), 347. This three-volume listing of architects documented in Portugal includes sixteen engineers, master builders, and architects who worked in India between 1516 and 1650.

23. Garcia Orta, Coloquio dos simples e drogas he cousas medicaes da India . . . (Goa, 1568).


26. In a painting by Andrea Pozzo at the Church of the Gesù in Rome, we can see D. Pedro Mascarénhas introducing Saint Ignatius of Loyola and Saint Francis Xavier to the pope as they prepare to leave for India. See Neves, Jardins e palácio.

27. For research on Indo-Portuguese religious, military, palace, and veranacular architecture from original sources, see Carlos de Azevedo, A arte de Goa, Dâmão e Diu, 2nd ed. (Lisbon: Pedro de Azevedo, 1992); Helder Carita, Palácios de Goa: Modelos e tipologias da arquitetura civil indo-portuguesa (Lisbon: Quetzal Editores, 1995); Walter Rossa, Cidades indo-portuguesas: Contribuições para o estudo do urbanismo português no Indo-Paquistão (Lisbon: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses, 1997); Carmo Azevedo, Tomás Fernandes (um grande Mestre Manuelino na Aíns: de Cochin a Malacca), Separação do Boletim do Instituto Menezes Bragança, no. 172 (Panjim-Goa: Compusnet, 1994).

28. Ramponi was the sculptor sent by Cosimo de Medici to accompany Saint Francis Xavier’s tomb to Goa.


30. As for other arts and crafts, the catalogue from the 2004 Gulbenkian Foundation exhibition Goa and the Great Mughal offers a wealth of new information confirming the intense cultural and artistic fusion between the Portuguese and the Mughal courts during the sixteenth and seventeenth centuries.


32. Gul-Badan Begam, The History of Humayan (Humayun-Nama), trans. and ed. Annette S. Beveridge (1902; repr., Delhi: Adabiyât-i Delli, 1972). The story, written by Humayun’s sister Gul-Badan Begam, describes a celebration in 1530 where Portuguese brocades were used to decorate the tents in the garden.


34. Silva attributes the tortoishell caskets to the presence of Mughal craftsmen in Goa after Haji Habibullah’s embassy in 1575. See Flores and Silva, Goa and the Great Mughal.

35. Many examples of silverwork with innovative motifs showing Mughal influence appeared in Portugal around 1575–80, evidence of the rich cultural fusion between the two cultures at this time.


37. Moynihan, Paradise as a Garden, 98.


41. Villiers-Stuart, Gardens of the Great Mughals, 23.

42. “Two anonymous tombs at Delhi fall into the same category of Timurid-derived imports . . . and, on stylistic grounds, can safely be dated to this period [i.e., the Humayan reign]. These mausoleums, now known as the ‘Sabz Burj’ . . . and the Nila Gumbad . . . introduce to northern India a late-Timurid formula for octagonal tombs . . . The ground-plan of this tomb type is in the form of an irregular octagon. It contains a central square (cruciform) chamber connected to axial pishtags in the outer faces, which alternate with smaller (half-octagonal) niches in the narrower sides” (Koch, Mughal Architecture, 36–37).

43. Ibid., 37.


45. Moynihan, Paradise as a Garden, 116.
46. Stronge, "Land of Mogor," 137.
47. Koch, Mughal Architecture, 96.
48. Ibid., 102.
51. Wescoat and Wolschke-Bulmahn, Mughal Gardens, presents a complete and very useful review of Mughal garden literature, emphasizing the growing interest in the subject since the mid-1980s.
53. Ibid., 67.
54. Ibid.
55. Ibid.
56. Marie Luise Gothein, Indian Gardens (n.p.: Gardenvisit.com, 2008). "The water level in the system of wells, the so-called Baolis, which fluctuated extremely from season to season, proved to be a particular challenge to their art" (ibid., 22).
58. Large, rectangular artificial ponds were used all over India. "In India . . . gardens are an intrinsic part of the houses for people and for the gods. Inside gardens, the water feature is the artificial water pool as decoration and as an indispensable means for bathing and irrigation" (Gothein, Indian Gardens, 21).
59. Codex Casanatense, Rome.
60. François Pyrard, The Voyage of François Pyrard of Laval to the East Indies, the Maldives, the Moluccas, and Brazil, trans. and ed. Albert Gray, assisted by H. C. P. Bell, 2 vols. (London: 1835), bk. 1, chap. 3, sec. 8, 292: “The quinta of the Penha Verde (the green rock) is so called from a lofty mountain rising immediately behind it in the form of a cone covered to the utmost peak with a luxuriant vegetation. . . . The grounds are not devoid of that constant appendage to every Portuguese quinta, a sort of terrace, accommodated with seats, and shaded by vines.”
62. Castro, Tábua dos roteiros da India. On the Penha Verde Garden, see J. C. Loudon, An Encyclopaedia of Gardening, new ed. (London: Longman, Rees, Orme, Brown, Green, and Longman, 1835), bk. 1, chap. 3, sec. 8, 292: “The quinta of the Penha Verde (the green rock) is so called from a lofty mountain rising immediately behind it in the form of a cone covered to the utmost peak with a luxuriant vegetation. . . . The grounds are not devoid of that constant appendage to every Portuguese quinta, a sort of terrace, accommodated with seats, and shaded by vines.”
63. Koch, Mughal Architecture, 66.
65. João de Castro, Primeiro roteiro da costa da India: Desde Goa até Diz; Narrando a viagem que fez o vice-rei, D. Garcia de Noronha, em soccorro desta ultima cidade, 1558–1559 (Porto: Typographia Commercial Portuense, 1843), 65. In his description of the temple (‘pagoda’), the author expresses amazement “how men could have dared to cut within the mountain an enormous temple carved into a marvelous work that seems impossible to have been made by human hands . . . and truly it seems as if the proportion and symmetry of each statue is too much to have been done by an artist, even if he was Apelles.” See Mildred Archer, Early Views of India: The Picturesque Journeys of Thomas and William Daniell, 1786–1794 (London: Thames and Hudson, 1980), 190–93. The Elephanta Temple was later painted and described by Thomas and William Daniell. To this day it remains a most amazing work of art.
66. Murphy, Travels in Portugal, 261. Murphy visited Penha Verde and refers to the first importing of sweet orange trees.
67. During the 1530 and 1540s in northern India, a late Timurid formula for octagonal tombs was introduced in tombs erected in Delhi. Koch, Mughal Architecture, 36.
68. Villar, foreword to Flores and Silva, Goa and the Great Mughal, 7: “The first contacts date from 1530 [and were] significantly more peaceful, not only stimulating trade, diplomatic contacts and missionary work, but also mutual associations and influences in the fields of culture and the arts.”
69. Akbar’s historian Qandahari writes, “A good name for kings is [achieved by means] of lofty buildings . . . that is to say, the standard of the measure of men is assessed by the worth of [their] building and from their high-mindedness is estimated the state of their house.”

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80. The only Medici Florentine villa built before 1524 was Villa Medici in Fiesole, designed by Michelozzi c. 1458–61. Villa Medici in Castello was designed in 1538 by Nicolo Tribolo and completed by Amanati and Buontalenti to celebrate the establishment of the Medici as dukes of Florence in 1537.


83. Ebba Koch, *The Complete Taj Mahal and the Riverfront Gardens of Agra* (London: Thames and Hudson, 2006), 37. It displays the earliest example of a garden focused on the water, with a terraced area lining the river and a garden on the landward side, although the configuration does not yet have the strictly planned symmetrical form of the later Shah Jahani plan examples.


87. Villiers-Stuart, *Gardens of the Great Mughals*, 140. The building of the Torres Garden around 1570 coincides with the richest moment of the Portuguese/Mughal artistic and religious relationship, and Prince Salim (the future Emperor Jahangir) was a keen collector of Portuguese paintings.

88. Ibid., 141: in *Mughal Architecture*, Ebba Koch presents other examples of pavilion-making in the center of a lake—some isolated, others connected by a walkway.

89. Though the actual architecture of the central pavilion in Torres is also Italianate, its form or positioning has a precedent in Mughal India.


94. Angel Sánchez Rivero and Angela Mariutti de Sánchez Rivero, eds., *Viaje de Cosme de Médicis por España y Portugal* (1668–1669) (Madrid: Centro de Estudios Historicos, 1933). See the reference to Lorenzo Conte Magalotti, who accompanied the prince as chronicler. Another meticulous description was made by Aleixo Colletes de Jantillet, a diplomat from Lorraine, in *Horae subsecivae* (Lisbon: Joannis a Costa, 1679).

95. This restoration work was commissioned in 2008 by the marquis of Fronteira, Fernando Mascarenhas, led by ACB Landscape Architects and sponsored by an EEA grant from Norway in collaboration with the Association of Historic Gardens of Portugal.

96. Another special feature is the *qanat* works, which are subterranean canals that collect underground water and supply the reservoirs with water for irrigation. According to Koch, these are of Iranian inspiration and served to bring water from the foothills of the Satpura Mountains to the town and gardens. They also belong to the western Islamic tradition and can be seen in Sicily and Spain.

97. Sousa Viterbo, *Dicionário Historico*. In vol. 1: Ambrosio Argueiros (mestre das obras de pedraaria), Pero Barreto de Resende (1655), João Baptista Courato (engenheiro-mor), Pero Fernandes (1559) (engenheiro), Inofre de Carvalho (1551) (mestre de obras). In vol. 2: Manuel Godinho Heredia (cosmógrafo e descobridor), Francisco de Hollande (1582) (pintor/arquitecto), Valentim Jorge (1640) (engenheiro), Afonso Madeira (mestre de obras), Francisco Pires (mestre), Manuel della Ponte (mestre de obras), Simão de Ruão (arquitecto militar). In vol. 3: Júlio Simão (1956), Sebastião Tibao, Lourenço Argueiros (1540), António Pinto da Fonseca (1611).

98. Ibid., 1:66–74.


100. Ibid., 3:126; see also Rafael Moreira, *O Rosto de Camões e outras imagens* (Lisbon: CNCDP, 1989), 14–15, who considers Diogo de Torralva the architect of Bacalhoa. He was the son-in-law of Francisco Arruda, architect of Torre de Belém, in which the domes were greatly inspired by Indian architecture. Arruda may have passed down to Torralva the architectural elements he had seen in India.

101. François Pyrard, *Voyage de François Pyrard*, vol. 2, pt. 1: “This palace is furnished with all necessary things—a chapel built in 1512, a rain water reservoir, and a magnificent garden” (author’s translation).

102. The edict of 1496 expelled from Portugal all Jews and Muslims who refused to convert to Catholicism.


106. J. Castel-Branco Pereira, foreword to Flores and Silva, *Goa and the Great Mughal*, 8: “One of the end results was the creation of surprising objets d’art where two civilizations simultaneously restated their respective position and intersected.”
In the past, studies, including my own, of Mughal gardens have focused on the formally planned garden, the so-called *chaharbagh*, which is overwhelmingly architectural in character. But over time I have come to note other, freer ways in which the Mughals dealt with landscape, which can be described as making imprints on nature through artistic means (fig. 9.1). There is nothing comparable to this Mughal form of landscape art in the entire Islamic garden tradition, and, though it testifies to a deep engagement by the Mughals with the landscape of India and with Indian ways of taking note of and forming nature, it gives the Indian element an entirely new twist, making it a player in a political and ideological allegory of the Mughal emperor. The Mughals are always good for a surprise about what is possible within the Muslim world and in India, and their wedding of nature with art makes one think of what happened at about the same time in the gardens of Europe during the late Renaissance. The Mughals challenge the view that “characteristics that ornament the Renaissance garden . . . have no links to the Islamic world: sculpture, topiary, and grottoes.” Sculptured rocks, grottoes, and inscriptions do form part of the repertoire of the Mughal engagement with nature, and instead of topiary work there are artificial tree columns in the form of large balusters with their bulb at the bottom and tapering toward the top, thus having, as the Mughals saw it, the shape of cypresses, *sarv andam*.

As I have discussed in detail elsewhere, the Mughals were deeply interested in European art, but here in this case of shaping landscape elements artificially to express specific ideas it is difficult to establish a direct link—at least so far I have not been able to find one. The individual forms and philosophy of the Mughal and Renaissance garden are different, but the general "movement of diastole and systole, of contraction in a closed, highly sophisticated structure and of expansion through architectural and sculptural
means outside of any human enclosure and dimension” which Battisti sees as a characteristic trait of the evolution of the Italian garden of the early modern period is comparable. Also comparable is the desire of elite patrons to have themselves represented in a garden and landscape context through an artificial transformation and manipulation of nature. The question is whether we should speak here of analogies or genealogies or rather of ”synchronous connections.” In any case, the Mughals had no problems with appropriating European art for their own purposes, and it is thought-provoking that similar developments occurred at the same time in Europe and Asia, though the connection is not always clear.

I will commence by briefly summarizing my thoughts on the geometrically planned Mughal chaharbagh* and then move on to the irregular forms of dealing with nature. The foremost characteristic of the Mughal garden is its emphasis on architecture and orderly planning, which Babur (r. 1526–30) famously claims to have introduced into “unclean and disorderly” (bi safa wa bi-siyaq) Hind or Hindustan (as the Mughals called the Indo-Gangetic plain). Babur’s words have often been interpreted as a general critique of Indian culture, but what he referred to was then the product of a Muslim government, the Lodhi dynasty (r. 1451–1526). Babur uses the phrase “architectural modes and regularly ordered gardens” (taur-i tarrahiya wa baghchaha-yi siyaqdar) in connection with his first garden at Agra, laid out in 1526, which he called a chaharbagh. In its strictest interpretation, the much-discussed term chaharbagh, or its abbreviated form charbagh, designates an enclosed cross-axial four-part garden, chahar meaning “four” and bagh ”garden” (fig. 9.2). Babur, however, applied the term in its widest sense, to architecturally planned gardens with intersecting raised paved walkways, platforms, and pools. Chahar bagh, for him, also includes terraced gardens on mountain slopes and his extravagant rock-cut garden, the Bagh-i Nilufar at Dholpur (see below). Writers of the later sixteenth century point out that the “design of [intersecting] walkways” (tarh-bandi-yi khiyaban) was the most characteristic feature of his gardens, and a novelty in Hindustan.

While in the Mughal context the term chaharbagh seems to disappear after Babur, the form persisted: Babur’s successors built the grandest and most consistently planned chaharbaghs in the entire history of garden architecture. By the time of Shah Jahan (r. 1628–58), we can identify three
well-defined formal variants of the Mughal *chaharbagh* (fig. 9.2). First is the enclosed canonical cross-axial *chaharbagh*, which had made a grand entry in the rigorously geometrical tomb garden of Humayun (1562–71) (fig. 9.2 top). Second is the terrace garden, a linear arrangement planned in steps along a longitudinal axis—famous are the Shalimar Gardens of Kashmir (1620 and 1634) and Lahore (1641–42), composed of square *chaharbaghs* which are doubled to form a rectangular design (fig. 9.2 bottom left). And third is the waterfront garden, which I have identified as a configuration of a riverfront terrace, on which are placed the main symmetrically arranged buildings, and a *chaharbagh* on the landward side (fig. 9.2 bottom right). This garden type appears first as a residential garden at Agra, but the grandest example, also at Agra, is the funerary garden of the Taj Mahal (1632–48). All three forms are not only characterized by axial planning and (ideally) a symmetrical arrangement of garden buildings, but also furnished with an established set of architectural features.

Taking the cue from Babur, it has been plausibly suggested that the Mughals saw in these strictly planned gardens a means to demonstrate the new order of Mughal rule in Hindustan. Taking the line of investigation further, I have tried to show that the garden became a module in the planning of cities and palaces, and in the last analysis, under Shah Jahan, a political metaphor for a golden age brought about by the good government of the Great Mughal. It appears, however, that in the previous discussions Mughal formalism has been somewhat overstressed and that the connection between *chaharbagh* and Mughal imperial order in India has been argued too narrowly.

The geometrical aspects of the Mughal garden have diverted our attention from another approach, in which no regular system is forced upon nature but nature becomes the main protagonist. Here the natural landscape is the

9.2 The three types of Mughal *chahar bagh*. Top, cross axial: tomb of Humayun, Delhi (1562–71); bottom left, terraced: Shalimar Gardens, Kashmir (1620 and 1634); bottom right, waterfront: Lal Mahal, Bari, Rajasthan (1637).
determining factor, or a feature of nature becomes a garden element in itself. This form of dealing with landscape begins with Babur’s rock-cut Bagh-i Nilufar at Dholpur, which, with the best will in the world, cannot be called regularly planned (see below). It forms such an antithesis to the geometric order of the three formal garden types that it is difficult to understand why Babur calls it too a *chaharbagh*.

However, the Bagh-i Nilufar is not such an isolated phenomenon as it seems at first glance: on the contrary, it belongs to a distinct approach by the Mughals to dealing with the nature of Hindustan, but typically, like the *chaharbagh*, it serves their image and has a political aspect. Nature is related to rule and dynastic self-representation. The Mughal *padshah* (by established convention rendered as “emperor”—and this seems to be almost exclusively an imperial enterprise)—claims nature as his own by making a permanent imprint on it with artistic means, with architectural features, sculptures, and inscriptions. I would like to take the argument further and suggest that the natural form, highlighted and ennobled by the emperor, becomes the garden element of his realm and consequently turns the entire Mughal Empire conceptually into a garden. It testifies to the extent of the Mughals’ engagement with India that they express themselves here largely in Indian terms. They relate themselves to those elements that have a special meaning in the Indian religious and cultural tradition, and thus the claim on nature itself is attuned with an ongoing Mughal project, from Babur to Shah Jahan, to become, as rulers, part of the culture of India.

This involvement with India has been discussed in length for Akbar, less so for Jahangir. But the artistic expression of such ideas became Jahangir’s special agenda. In a little-known painting in Berlin, he had himself represented like an Indian deity or ruler. He appears with a large solar and lunar halo, scantily clad in a *dhoti*, the Indian loincloth, seated in the lotus position, and served by a female consort who is possibly his favorite wife, Nur Jahan, under a baldachin held in the clouds by European putti. It is by all standards the most Indian (and eccentric!) depiction of a Muslim king one could possibly imagine. It was also Jahangir who was, as we shall see, the most eager among the Mughal emperors to associate himself through artistic transformation with the nature and landscape of Hindustan. There were various ways to effect this.

**Imprinting of Nature**

**The Rock-Cut Garden**

The Bagh-i Nilufar (Lotus Garden), as Babur named it when he laid it out in A.H. 933 / 1526, is situated on a hill to the north of Dholpur, a town south of Agra. Today the garden forms part of a village which is built over some of it. Its most outstanding features are several lobed pools linked by a system of canals, all cut out of the rock. One pool had four narrow channels, a quadripartite feature, which may have to do with why Babur called it a *chaharbagh* (fig. 9.3). Originally Babur had even envisaged having a whole pavilion cut out of the red sandstone bed of the hill, but since the stone was not high enough he decided on the pool.

With the creation of the Bagh-i Nilufar, Babur clearly elaborated on an earlier project at Kabul, about which we know through Jahangir. When Jahangir, the great-grandson of Babur, came to Kabul as emperor in 1607, he visited a dais (*suffa*) near a platform (*takht*) on the slope of the Takht-i Shah, a mountain south of Kabul where Babur used to sit and drink wine. In one corner of the terrace a pool (*hauz*) was carved out of the stone, and on the wall were inscribed the words “The seat of the king [takht-i padshah], the asylum of the world, Zahiru-d-din Muhammad Babar, son of ʿUmar
Shaikh Gurgan, may God perpetuate his kingdom, 914 (1508–9).^25 The inscription and the seat play with the name of the mountain, Takht-i Shah, which means royal throne or royal seat, on which Babur placed a takht-i padshah or imperial throne or seat. Jahangir, to associate himself with his ancestor’s marking of the mountain, ordered another platform (takht) to be carved out next to it, and another pool, and had his own name engraved there together with that of Timur, from whom the Mughals were so proud to be descended. When Jahangir visited this place, he had the pools filled with wine and held drinking parties with his courtiers, a time-honored gesture by the Muslim prince, claiming here on earth the future joys of paradise.^26 I have not been able to find out whether the terrace with the carved pools still exists, but the “Khana Sanghi” (Stone House) that Charles Masson drew in the second quarter of the nineteenth century might possibly mark this spot (fig. 9.4).^27

Jahangir continued to relate himself to idyllic landscape localities with platforms and inscriptions: he describes seeing, on his way out of Kashmir over the Pir Panjal in
October 1620, another dais that he had made near a spring and waterfall not far from the village of Bahramgala, over which he ordered an inscription to be placed with the date of his passage. Babur had started the tradition of fashioning garden elements out of rocks at Kabul, and he appropriated here, for his own secular purposes, a distinct regional religious tradition, reaching from the Buddha statues and caves at Bamiyan, which he knew, to the rock-carved temples of India. One also wonders to what extent the Mughals knew about the time-honored Chinese tradition of transforming and inscribing landscape—though in China it was not an (almost) exclusive practice of the emperors, as in Mughal India, but rather a collective cultural phenomenon, intimately connected with the experience of the sublime and harmony in nature in accordance with Confucian philosophy.

The Grotto and the Sacred Spring

Mughal grottoes appear in connection with a spring, and the idea of a rock-cut garden also plays a role in it. The grotto is framed by an architectural façade and houses a spring sacred to the Hindus. At Mandu, the previous residence of the Malwa sultans who were vanquished by Akbar,
in A.H. 982 / 1574–75 Shah Budagh Khan, the new administrator of the Mughal Empire, constructed the Nilkanth, a pleasance on the mountainside with a magnificent view of the valley below. The architecture consists solely of a three-sided open courtyard formed in the manner of a cour d’honneur of three large pishtaq (iwans or large niches in rectangular frames) set into the mountain (figs. 9.5, 9.6). The central pishtaq is framed by two domed rooms and leads to a grotto-like chamber, also with a dome, in the interior, where the waters of a spring, sacred to Shiva, the god with the blue throat (Nilkanth), fall into a pool through a channel from an upper reservoir (fig. 9.7). Shah Budagh Khan appropriated the ancient Indian religious site by framing its natural features with the pishtaq, the typical monumental entrance porch of Mughal mosques, tombs, and madrasas. This architectural feature was here abstracted from its conventional context and multiplied to create a new and highly original pleasure house out of the living rock. The inventiveness of the design is the more noteworthy since the Nilkanth was a nonimperial commission.

Akbar did not miss the opportunity to put his own stamp on his subordinate’s creation, and when setting out from the north on his Deccan campaign in A.H. 1008 / 1600 and returning from there in A.H. 1009 / 1600–1601, he halted...
9.6 The courtyard of the Nilkanth at Mandu formed of three pishtags set into the rock.

9.7 Grotto-like chamber with spring coming from the mountain set in channel in middle of the back wall, Nilkanth at Mandu.
at Mandu and left two inscriptions at the Nilkanth commemorating his stays and his latest victory. One of them reads,

His Majesty, the shadow of God, the king Akbar after having conquered the Deccan and Dandes [Khandesh] set out for Hind[ustan] in the year 1009 (1600–1601), Composed by Nami.

1) At dawn I saw an owl sitting on the pinnacle of Shirvan Shah's tomb.
2) Plaintively it uttered the warning, “Where is all that glory and where all that splendor”?31

Akbar’s inscription accentuates the appropriated Indian grotto with what a ruler of Persianate culture was expected to express in front of sites of past glories, namely, that his own achievements would be as ephemeral as those of the great ones who ruled before him. With the motif of the owl decrying departed grandeur on the tomb of the medieval Islamic rulers of the Shirvanshah dynasty in eastern Transcaucasia, the poet Nami refers indirectly to the downfall of Mandu and Khandesh, brought about by Akbar.32

The architectural framing of a grotto with a spring is taken up by Jahangir in his palace Chashma-i Nur (Spring of Light), also known as Hafiz Jamal, in the hills west of Ajmer. He was extremely fond of this place; as he relates in his autobiography, he visited it thirty-eight times during his stay of about three years at Ajmer, where he had taken up residence to be close to the campaigns of his son Khurram (later Shah Jahan) against the rana of Mewar. The most remarkable feature of the otherwise largely destroyed ensemble is a high masonry pishtaq put up between two hillsides below an impressive already existing water lift, built by the local Hindu ruler Rao Maldeva of Marwar in 1535. Jahangir’s pishtaq provides access to a grotto in the mountainside, from where the spring fills a basin at the foot of the pishtaq (fig. 9.8). On the top of the pishtaq a relief inscription carved out of white marble panels states that in A.H. 1024 / 1615 Jahangir raised his palace at the bank of the spring and that he named it Chashma-i Nur, in allusion to his title Nur al-Din (Light of the Faith) (fig. 9.9).

1. The king of seven climes, of lofty fortune, whose praise cannot be contained in speech,
2. The lustre of the house of king Akbar, emperor of the age, king Jahangir,
3. When he visited this fountain through his bounty, water began to flow and dust turned into elixir,
4. The Emperor gave it the name Chashma-i Nur (Fountain of Light) from which the water of immortality acquires its relish,
5. In the tenth year from the accession of that king, the holy champion, at the behest of wise counsel.
6. On the bank of the Chashma-i Nur, this edifice adorned the world as was destined,
7. Wisdom wrote the chronogram33 of its completion [thus: it is] “The palace of king Nur al-Din Jahangir”
8. It was written by ʿAbd Allah.34

The Mughals also associated themselves with the sites of several springs of Kashmir, sacred to Hindus, and built their gardens around them, famously Jahangir at Virnag, where in 1609 he began to construct (or reconstruct) the octagonal reservoir around the source of the river Jhelum (Bihat), which comes up in a deep pool (fig. 9.10).35 On the occasion of later visits, Jahangir put up two inscriptions at Virnag, both on the walls of the large arched niches surrounding the octagonal reservoir. The earlier inscription reads (fig. 9.11),

The padshah of seven regions the justice spreading shahanshah, father of Victory
9.8 Chashma-i Nur near Ajmer, a high pishtaq set before a grotto in the mountainside below the water lift of Rao Maldeva of 1535, completed in 1615.

9.9 Inscription of Jahangir containing the date A.H. 1024 / 1615 on top of the pishtaq of Chashma-i Nur near Ajmer.
Nur ud-Din Jahangir Padshah, the son of Akbar Padshah Ghazi

In the 15th year after the accession with his arrival honored this fountain-head of bountiful mirror-like water.

This building found completion by the order of that Majesty.


The source of reason obtained its date as qasr abad chashma-i Virnag (May the palace of the fountain of Virnag flourish). Hijri 1029 [1620].

The later inscription is as follows:

Thanks to God! What a (beautiful) waterfall and running stream has Haidar prepared at the order of the King of the World, the king of the time! This running stream has reminded us of the stream of Paradise. Kashmir has obtained fame from this stream. The invisible Sarush [angel Gabriel] mentioned the date of the canal to be:

"Az chashma (i) bihisht birun amadah ast jui," i.e.,
The stream has come out of the spring of Paradise 1036 [1626–27].

Mughal Landscape Art as Imperial Expression 195
The discussion so far has shown that the Mughals’ desire to manipulate and appropriate nature to demonstrate imperial control over it was particularly pronounced in Jahangir. He liked to leave his imprint on nature by artistic means, and he thought in larger terms than anybody else. Besides having garden features cut out of rock and framing sacred springs, he also put stone tablets with artistically rendered inscriptions on notable trees and turned them, as it were, into imperial furniture by putting up sitting platforms around them. Since they were the seats of a ruler, they suggested a throne, and thus had a significance beyond normal seats. The inscriptions usually referred to his lineage and thus emphasized dynastic legitimacy. It appears almost as if Jahangir was mapping out an “imperial topography” with garden features, and this brings to mind the sacred topography of certain regions of India where an accumulation of particular spots is visited by pilgrims. Examples include Kashmir or the region of Braj around Mathura, where Krishna, the incarnation of the god Vishnu, spent his youth.

Jahangir set up a stone tablet between two plane trees in the Shahr-ara garden at Kabul and had it inscribed with his name and the names of his ancestors back to Timur. On the reverse side an act of his good government was recorded: Jahangir “had totally rescinded Kabul’s custom duties and excises,” and any of his descendants or successors “who acted contrary to this would be subject to divine wrath.” To emphasize his relationship with the trees, he gave them names implying that they were serving him, calling one Farah-bakhsh (Joy-Giver) and the other Saya-bakhsh (Shade-Giver). He also gave names to cherry trees in Kashmir because he was delighted with the taste of the fruit they had borne when he arrived at Srinagar in spring A.H. 1028 / 1619. The name-giving celebrated the Mughals’ horticultural success in introducing cherry trees to Kashmir, which had taken place under Akbar.

In 1617, near Ujjain in central India, Jahangir had a platform made around a strangely shaped palm tree, the trunk of which had forked into two branches. As the imperial scientist he was, he had it measured and painted for inclusion in the Jahangirnama. The full passage, which shows Jahangir’s scientific approach and thoroughness in observing detail, is worth quoting:

9.11 Inscription of Jahangir at Virnag, commemorating his visit of A.H. 1029 / 1620.
At this halting-place a palm tree [dirakht-i khurma, literally “date tree”] came to view, the form and habit of which were somewhat strange. The original tree had one trunk; when it had grown to 6 gaz [a gaz is a Mughal measure of length which corresponds to about 32 inches or 81.28 cm] it turned into two branches, one of which was 10 and the other 9 1/2 gaz. The distance between the two branches was 4 1/2 gaz. From the ground to the place where the branches and the leaves came to an end [?; Thackston: “had come out”], there were on the side of the large branch 16 gaz, on the other branch 15 1/2 gaz. From the place where the branches and the green leaves began [?] to the top (trunk) of the tree was 2 1/2 gaz and the circumference was 2 3/4 gaz.

I ordered them to make a chabutara [platform] round it of the height of 3 gaz. As the trunk was very straight and well-shaped, I told the artist to depict it in the illustrations of the Jahangir-nama.40

In the following year, 1618, in the garden of his son Khurram, then already entitled Shah Jahan, at Ahmedabad, Jahangir noted a maulsari (also spelled maulsiri or maul-shree) tree, or bullet wood (Mimusops elengi),44 with a bench around its trunk. The trunk had a hole over which Jahangir had a marble tablet fixed, which could be used as a back rest when one sat on the bench. An inscription on the tablet, today luckily preserved in the British Museum in London, marked the whole, in the words of Jahangir, “as a memento on the page of time”:

God is great!
It ran extempore on the tongue of inspired narration
The seat (nishastgah) of the Shah of the seven climates (kishvar),
Jahangir, son of Shahinshah Akbar.
In the thirteenth year of the accession of Jahangir Shah.
The year 1027 [1618]. (My translation)45

It is noteworthy that in this case Jahangir did not imprint a tree in the wild, but in the garden of his son. His intrusion can be seen in two ways: either as a mark of distinction on Shah Jahan, who was then still his favorite son and designated heir, or else a demonstration of land ownership. This brings us to a still unsolved issue of Mughal governance, namely, privately owned property. At Jahangir’s accession, the fourth of his twelve decrees stated that he would not touch the property (mal wa manal) of his subjects,46 whether unbeliever (kafir) or Muslim.47 But this certainly did not apply to the gardens of the Mughal nobility and members of his family. Upon their deaths, their gardens usually went to the crown, and the emperor would either keep them for himself or bestow them on somebody else.48

The imperial imprinting of Hindustan with garden elements also demonstrates the imperial claim on the land.

And indeed, one of the illustrations in the Jahangirnama, an unfortunately badly damaged painting in the Raza Library at Rampur, shows Jahangir on his horse in a grove of palm trees watching the measuring of the forked palm tree in the foreground.44 Soon after, when Jahangir proceeded from Ujjain to Mandu, another tree, in the village of Shaikhupur, caught his attention. It was an enormous banyan tree (Ficus benghalensis), the most revered of Indian trees, under which the Buddha sat and received enlightenment at Bodhgaya.45 Akbar had left an imprint of his hand on its trunk. Jahangir had the tree’s measurements taken and added his own hand mark next to that of his father. To keep these imperial imprints for posterity, he had them both carved on a piece of marble, which was attached to the trunk of the tree. In addition, a platform (chabut[a]ra) was put up around it.45
Rocks Sculpted into Elephants

The demonstration of imperial control over nature, or “Mughalization” of nature, also stands behind the practice of carving elephant figures out of rocks in various regions of the empire. The elephant, at all times the favorite animal of India and revered as the elephant-headed Ganesh, son of Shiva, was also an important status symbol for the Mughals.49 Blissfully ignoring the fact that sculpting animals (and humans) in the round was the most reprehensible form of breaking the Islamic injunctions against the making of images, the Mughals went out of their way to revive the ancient Indian tradition of carving religious images out of rocks.50 By investing their elephants with dynastic inscriptions, they transformed this revivalist exercise and gave it a specific political touch; the aim seems to have been, as in the rock gardens and appropriated springs and trees, to set an imperial mark on Hindustan, in Indian terms, so to speak. The rock images form part of a larger program of elephant sculptures decorating the gates of the great Mughal fortress palaces in imitation of the elephant gates of Indian rulers. At the Hathi Pul, the Elephant Gate of Raja Man Singh’s palace at Gwalior, Babur admired “a sculptured image of an elephant with two drivers (fil-ban),” which he considered to be “exactly like an elephant.”51 His successors, beginning with Akbar, took up the idea, and the great fortress palaces of the Mughals, the Agra Fort, Fatehpur Sikri, and the Delhi Fort, each had a gate flanked by large sculptures of elephants.52

It was also Akbar who started the tradition of having rocks sculpted into elephants. In 1601, he had an elephant cut out of a rock in the Tapti River in front of the palace fortress of Burhanpur. According to the Mughal historian Muhammad Hashim Khafi Khan, writing in the first half of the eighteenth century, this act had a special meaning in wresting Burhanpur from the Faruqi rulers of Khandesh (1382–1601). It is worth including the full passage, not previously translated, because it reveals the political meaning of Akbar’s action.

It is said that in the river Tapti, which is close to the city of Burhanpur, there was a large rock. According to the pronouncement of his Holiness Burhan al-Din—who was one of the great religious persons of that time, and the Faruqi rulers gave the city of Burhanpur his name after they had built it—what the shaikh stated was, “As long as this piece of stone will remain in its original form, the kingdom will remain in your possession. But when this stone will be changed into the figure of an elephant, the fort and the dominion will fall from the hands of your dynasty.” After a prolonged siege the city came into the possession of Arsh Ashyani [posthumous title of Akbar], but not the fort, and when he learned about the pronouncement of the spiritual leader [pir-i din] of the Faruqis he commanded skilled stonemasons [sangtarashan-i chabuk dast], and in the turn of a hand they sculpted that piece of rock into the image [surat] of an elephant. And because of the firm belief they had in their own pir, Sultan Bahadur [Faruqi] lost his courage [and his dominion to Akbar].53

The unsculpted rock in its natural, raw state appears here as a token of the sovereignty of the Faruqis, threatened by the potential of an elephant figure that symbolized a power higher than theirs. It was Akbar who was destined to activate it and to obtain victory through it—the elephant as ancient Indian symbol of royalty belonged to him—not the Faruqi sultans. The passage is key to our argument because it illustrates that in Mughal eyes the transformation of nature into art, of a rock into an elephant sculpture, was an act of sovereignty.
The statue in the Tapti River excited the interest of many European travelers. The English merchant William Finch saw it in February 1610 and wrote, "By the castles side in the river lyeth an elephant of stone, so lively [i.e., lifelike] that a living elephant, comming one day to drinke, ranne against it with all his force and brake both his teeth. The head is painted red in the fore-head, and many simple Indians worship it." Later travelers, too, commented on its lifelike qualities and noted that it had become the object of veneration by the Hindus as a representation of Ganesh. The rock elephant still exists, though no longer in its once-acclaimed naturalistic form (fig. 9.12).

Needless to say, that elephant carving was also a favorite of Jahangir, the dominant figure in the Mughal imprinting and transformation of nature; he was the first to highlight these sculptures with inscriptions containing the date when they were created and his own name. Early in his reign, when on his way to Kabul, he had an elephant carved out of a white rock in the riverbed (presumably of the Sorkhrud) at Nimla near Jalalabad; on its breast he ordered the inscription "The white stone elephant of Jahangir Padshah," which gave the date A.H. 1016 / 1607. At Ajmer an elephant is recorded, carved out of a single rock, which bears the inscription:

1) The chronogram of this stone elephant by Divine mystery, came out:

2) This piece of rock—the elephant of Jahangir padshah [giving the date A.H. 1022 / 1613–14.]

The most splendid (though unfortunately badly damaged) elephants, a male-female pair, were put up near the
9.13 Life-sized sculpture of male elephant shaped out of the living rock, harnessed with chains and ropes and with fragments of a mahout, lying on a platform at the Hathinala pass, previously called Chauk-i Hatti, now Hathi Mata, near Naushera on the Mughal road over the Pir Panjal pass into Kashmir, A.H. 1035 / 1625–26.

9.14 Back view of the male elephant of Hathi Mata.
end of his reign at the Hathinala pass (in Mughal times Chauki Hatti). The place is today called Hathi Matha and is located near Naushera on what was in Mughal times the main imperial road over the Pir Panjal pass into Kashmir (figs. 9.13, 9.14). Jahangir mentions a new building and a fine terrace at the halting place in October 1620, before the statues were put up. The elephants are cut out of the living rock and lie on platforms whose faces are carved with rectangular panels in low relief. The animals are shown as courtly creatures, each with its trappings, rings round their ankles, ornamental chains around their necks, and bells hanging from their girths, and with remnants of a mahout. Ram Chandra Kak, who saw them before 1923, mentions that “originally, both these animals were covered with a thin coat of fine lime painted in colors. Traces of lime as well as of paint still exist.” Even in their ruined state they convey so much of the nature of elephants that one reacts to them as Babur did to the elephants of Gwalior. It is also unclear where sculptural art of such quality came from, in an age when it was supposed to be nonexistent. Jahangir does not mention the elephants in his autobiography, but one of the inscriptions originally set into their necks (no longer in place when the elephants were first recorded in 1917–18, but kept in the house of a dignitary of the village, from which Ram Chandra Kak had it brought to the Shri Pratap Singh Museum at Srinagar) proclaims that they were made for the emperor on the occasion of his visit in the Hijri year 1035. This must have taken place in the first month of the Hijri year in Muharram 1035, corresponding to October 1625, when Jahangir was on his way out of Kashmir to Lahore. The inscription produces the date a.h. 1035 / 1625–26 and contains the name of what seems to be the artist, a Hindu, as well as the name of the scribe:

God is great!

1) This statue of Bali Ganj (powerful elephant) was completed through the agency of Manhal [the Hindu sculptor?] at the arrival of the Emperor Jahangir.

2) I asked of my intellect the date in the Hijri (reckoning) and she [sic] said that it was the twentieth year of the reign of the Emperor [i.e., the Hijri year 1035, which corresponds to 1625].

Abd al-Ghaffur, the slave of God.

The Analogies Between Mughal Landscape Art and the Late Renaissance Garden in Europe

The discussion so far has shown that the Mughals’ desire to manipulate and appropriate nature to demonstrate imperial control over it was a special agenda of Jahangir. The enduring project of putting his stamp on the landscape of his entire Indian territories is unique for a ruler anywhere and at any time—only a Mughal padshah would proceed with such easygoing ingenuity and think in such large terms. But the idea of transforming nature with art to glorify a patron in a garden and landscape context links up also with earlier and contemporary trends in Europe, especially in Italy.

In Italy the Renaissance interest in celebrating and imitating nature turned in the sixteenth century into a deliberate questioning of the principles of balance and harmony of the High Renaissance, a trend that has been described with the somewhat controversial term “Mannerism.” It involves highly intellectual and complex iconographies and programs, the exaggeration and distortion of forms and proportions, forms taken out of their established context and used in new configurations, and, in painting, eccentric and unnaturalistic color schemes.
To transform nature with art and to make art appear like nature became a specific concern of this trend. In the design of gardens it led to the introduction of elements of artifice, deceit, and illusion into the purity of the natural setting, to an intense blending of art and nature that could lead to extreme transformations.62

European kings, princes, aristocrats, rich patriarchs, and church dignitaries used these ideas for their self-representation and had gardens built in which the domination of nature through art and artifice was to emphasize, symbolically and allegorically, their importance and power. The iconography of these gardens was expressed with complex and learned programs that drew from antiq-

uity (especially from classical mythology), philosophy, and science. The gardens were formally planned but contained areas of relatively uncultivated nature or simulated nature (the bosco), and within the axially arranged regular par-
terres appeared grottoes, labyrinths, basins, fountains, classical relics and newly sculpted statuary, and inscrip-
tions. Elaborate hydraulic water systems operated ingenious technical devices, giochi d’acqua (water jokes and water art), the aim of which was to arouse wonder and surprise. The villas of such gardens would house collections of art and natural objects and thus complete the display of the entire world of their patrons. Such elaborate gardens were a particular concern of the elites of Italy but were echoed also in the North, in France, England, and the Habsburg lands, culminating in the Baroque age in the Gardens of Versailles. I am introducing the European Renaissance gardens here because they display features that provide intriguing and fascinating analogies to Mughal ways of asserting themselves with garden elements and inscriptions in the Indian landscape.64

In Italy the Renaissance interest in the classical world also led to a revival of the Roman villa. Not only were its form and décor imitated, but modern villas and their gardens were often laid out on the very sites of ancient ones.65 A particularly telling example is the Horti Farnesiani or Orti Farnesiani in Rome, the gardens and summer house that Cardinal Alessandro Farnese (1520–1589) began to create on the northern portion of the Palatine Hill on the ruins of Roman palaces, mainly the palace of Emperor Tiberius (r. 14–37 C.E.), the Domus Tiberiana, but also the Domus Flavia and the palace of Caligula.66 Here the princely authority of one of the most important members of the papal curia literally overlaid the power and glory of the emperors of ancient Rome, establishing “not as much an analogy as a real continuity between the claims of emperors and popes.”68

The glorification of the ruler in a garden became for the first time a central motif in the garden of the Villa Medici in Castello near Florence, which the grand duke of Tuscany, Cosimo de’ Medici (1519–1574), began to refashion in 1537, soon after he came to power. Groups of statuary in fountains fed by an elaborate hydraulic system and grottoes conveyed symbolically the message that Cosimo would lead Florence into a new golden age of peace, justice, prosperity, and harmony. The iconographic program was worked out by Niccolò Pericoli, known as Tribolo, and Benedetto Varchi and also contained dynastic allusions in the form of portrait busts of Cosimo’s Medici ancestors.69 The garden had a huge impact inside and outside Italy.

Another influential Medici construction was the Villa Pratolino, created beginning in 1569 for the second duke of Tuscany, Francesco I de Medici (1541–1587), by his court architect and designer, Bernardo Buontalenti. Here sophisticated hydraulic machinery created a fantasy world that challenged natural creation. Its greatest marvel was the Apennine, the personification of the mountains of Tuscany in the form of a giant figure carved out of rock
by the sculptor Giambologna in 1579–80 and imitated and reproduced throughout Europe. And in the Villa Lante at Bagnaia near Viterbo, the architect Vignola created a garden for Cardinal Gianfrancesco Gambara, bishop of Viterbo from the 1560s onward, the terraced part of which had a program that evoked the golden age and the age of Jupiter in Virgil. Heraldic devices and statues of crayfish (gambero in Italian) alluded to his patron’s name. In France the garden of Henri IV (1553–1610) at Saint-Germain-en-Laye was designed in 1594 with grottoes, fountains, and pools as well as ornamental stairways and parterres spelling out the initials of the sovereign’s name, together with mottoes and emblems of the royal house.

Sculptures and inscriptions placed in a freer planned garden are characteristic of Bomarzo, northwest of Rome (completed ca. 1580), which displays, as Bredekamp writes, “the re-evaluation of the traditional garden structure of geometrically dominated nature into a free exchange of natural form and human intervention.” The Sacro Bosco (Sacred Grove) of Bomarzo has an irregular layout and is studded with buildings, grottoes, fountains, benches, sculptures, and inscriptions representing “a compilation of autonomous episodes” in the landscape and is thus particularly close to Jahangir’s project. The enigmatic program, however, was not political or dynastic, as in the Mughal case, but highly idiosyncratic: it has been interpreted as a personal allegory of Bomarzo’s patron Vicino Orsini (1523–1580), replete with cryptic allusions and references to literature, antiquity, astrological imagery, universal aspirations, exoticism, and so on, all intended, as its patron informs us, to arouse wonder and challenge the viewer’s knowledge. We come closer to India in the enormous rock-carved statue of an elephant mounted by his mahout and carrying a tower while seizing a Roman soldier in its trunk (fig. 9.15). Like Jahangir’s elephants, the Bomarzo animal announces its ownership: it has a harness covered with rosettes, which are the imprese of Orsini. The elephant and its surrounding sculptures indicate Orsini’s interest in a world beyond Europe, and especially in India. War elephants seizing men in their trunks are a distinct motif of Indian sculpture and appear in monumental form in the thirteenth-century sun temple of Konarak at Orissa, but since the Bomarzo elephant is clearly African and presumably from Hannibal’s army, given that it overpowers a Roman soldier, we seem to have here a rather ingenious fusion of classical and Indian references.

The “real” India, as opposed to its mythical form, became increasingly better known in Italy through educated travelers such as the learned merchant-humanist Filippo Sassetti (Florence 1540–Goa 1588), who in the last quarter of the sixteenth century corresponded from Cochin and Goa with family friends and even the grand dukes of Tuscany about Indian languages, geography, climate, botany, and spices. He sent seeds and plants to Florence, where interest in botany was highly developed; the grand dukes themselves possessed considerable knowledge in this field and sponsored its study. In Europe, scientific research in general had been on the rise throughout the sixteenth century and had found sponsorship from European courts, most notably, besides the Medici at Florence, at the Munich court of the Bavarian dukes and the court of the Holy Roman Emperor at Vienna and Prague. Their gardens contained plentiful botanical specimens and mineral displays and were visited by the famous botanists of the sixteenth century such as Aldrovandi and Clusius, who succeeded in bringing botany to the notice of the ruling houses and ensured that its study at the universities got their attention. In the early modern period the concept of rulership began to change and the claims to power could no more be based solely on salvation history and the divine right to
rule. Thinkers like Francis Bacon (1561–1626) requested the ruler to empower himself through learning and scientific research to be able to understand the nature of things and thus remain in control.80

It is amazing how this ties up with the interests of Jahangir. He was generally intrigued by natural phenomena, to the extent that he recorded them in a scientific manner in the multifaceted autobiographical history of his reign, the *Jahangirnama*. Several of Jahangir’s observations on biology, botany, geology, ornithology, and zoology have been valued by scientists as original contributions to their fields.81 So that he could have the species that attracted his attention recorded visually, the emperor commissioned studies of plants, birds, and animals from his painters; artists based their works on European models to achieve the required scientific naturalism. The Mughal *padshah’s* interest in the natural world was far more scientific than that of any of his counterparts in the Muslim world, and he perhaps comes closer than any European ruler to Sir Francis Bacon’s ideal of the prince as a learned observer and investigator of nature.82

Jahangir’s engagement with nature led him to patronize not only the artistic transformation of landscape but also objects that combined art with nature. His artists were up to the task, as we learn from the emperor himself when he gives an enthusiastic and detailed description of an artwork “the design of which he had never seen before.” Made in 1611 by an artist in his seal-cutting department, it was a hazelnut shell with four compartments of minuscule figural scenes carved in ivory, the first showing two wrestlers and a group of other men; the second, an enthronement scene; the third, rope dancers; and the fourth, Christ with followers under a tree.83 Such microscopic exercises were a characteristic agenda of the Mannerist art of northern Europe, and I have indeed found a hazelnut of this kind in the Historisches Museum of Basel. It is divided into four compartments into which carvings of limewood were pasted showing scenes of the Passion of Christ (fig. 9.16).84 The rare object formed part of the so-called Amerbach–Kabinett, the *Wunderkammer* of the Basel professor of law and collector of art Basilius Amerbach (1533–1591). The Basel hazelnut helped me reconstruct the object Jahangir
9.16 Hazelnut divided into four compartments, into which are pasted scenes of the Passion of Christ carved out of limewood, Germany, sixteenth century. Height 1.7 cm, width 3.7 cm (when folded out).

9.17 Hazelnut divided into four compartments, into which are pasted figural scenes carved in ivory relief, showing (from left to right) wrestlers, an enthroned ruler with attendants, tightrope walkers, and Christ with followers under a tree. Reconstruction of an art object made for Jahangir and described by him in August 1611 in his autobiography, the *Jahangirnama*.
describes, but we can imagine that the ivory carving of the Mughal court artist would have been much finer (fig. 9.17).

The Garden of the Empire Activated Through Imperial Performance

But let us return once more to Jahangir’s engagement with the Indian landscape. When we consider together all Mughal transformations of particular spots in nature and their accentuation with a dynastic imprint—the rock-cut gardens, enframed grottoes over ancient sacred springs of India, enclosed springs, trees furnished with royal seats, inscriptions, often with dynastic and political messages, rocks sculpted into elephants—the conceptual image of a garden emerges that stands for the Mughal territories between Kabul and the Deccan. Jahangir plays on the old connection between kingship and garden but gives it an entirely new and highly original twist that is without precedent in Persianate, Indian, or European tradition. When he transforms his whole empire into his garden, he does so not metaphorically as “the good gardener” who improves agricultural production,85 but as the dynastically legitimated king who claims the land as his own by artistic means. This is in contrast to the European gardens of the sixteenth century, where the garden owners imitated and transformed nature within a confined space. Also different is that Jahangir accentuated existing features of the Indian landscape instead of mimicking them.

The “garden of the empire” was an abstract notion that could only be activated and experienced through movement from one highlighted feature of the landscape to another. It reflected the peripatetic style of rule of the Mughals, who consolidated their vast territories by frequent changes of places. Their itinerary followed established routes along which the highlighted features of the landscape would be revisited and enjoyed, and while in progress the emperor would enrich his interaction with nature with spontaneous gestures.

When Jahangir moved out of Kashmir in spring A.H. 1016 / 1607 and saw oleander bushes in full bloom on the road between the fort of Rohtas and Rawalpindi, he ordered the men of his army to cut bunches of the pink blossoms and place them on their turbans:

The entire way from Pila to Bhakra I came down a riverbed that had some running water and oleander flowers86 like peach blossoms, very colorful and in full bloom. In the land of Hindustan this flower is always in bloom. There were many of them on both sides of the riverbed. To those riding and walking with me an order was given to put bouquets of these flowers in their turbans, and anyone who did not have a flower on his head would have his turban taken off. An amazing field of flowers was thus made!87

To have one’s turban taken off was a heavy punishment in a society in which men took pride in wearing them, and the order shows that the emperor was serious about realizing his extravagant idea of a gigantic bed of pink blossoms moving along with him on his way. For the poet Talib-i Amuli, who described the episode in his versified Jahangirnama, it was “a flower carpet spread on the way of the king” (zi gul farsh dar rah-i shah uftad).88 In another episode, Jahangir caught fish in a lake at Hasan Abdal and put pearls into their noses (mouths?) before letting them loose again.89 The Mughal emperor was not the only one to think of such eccentricities. We learn from Pliny the Elder that Antonia Minor, the wife of Drusus, stepson of emperor Augustus, put earrings on a moray eel (murena) that she
loved and that people visited the villa at Bauli where its fishpond was to see it.90

Even the soberer Shah Jahan could get carried away by flowers in bloom and count them to assess their exact numbers. When in Kashmir in April 1640, he admired an iris plant (bota-i susani) in the Bagh-i Nur Afza, the small palace garden in the Hari Parbat Fort, and counted on it 212 flowers, opened as well as in bud. The previous day he had feasted his eyes on a red rosebush (bota-i gul-i surkh) in the Farah Bakhsh Garden of the Shalimar Gardens, on which were counted no fewer than 4,500 flowers and buds!91 But Shah Jahan’s demonstrative interest in flowers also had to do with the iconography of his kingship, for he used flowering plants and floral symbolism to communicate the glory of his reign.92

The Artificial Garden

Given that well-ordered geometric schemes informed all of Shah Jahan’s art, architecture, and gardens, one would...
assume that extravagant ideas about transforming nature into works of art would be abandoned under his rule. Instead, the earlier imperial imprints on nature and the transformation of nature were in fact taken one step further and sublimated in the concept of the artificial garden, in which the manipulation of natural material gave way to pure artifice. Art now had to imitate nature, and it was again to serve the imperial image. In order to express the idea that the palace of the emperor was a garden and, as such, a metaphor for his rule, artificial trees were created in the form of columns carved from marble blocks. Styled “cypress bodied” (sarv andam), they had the shape of tapering baluster columns decorated with naturalistic leaves—at first acanthus was preferred, and later lanceolate shapes resembling lotus petals. The columns were also significant for a wider Indian audience because they grew out of pots with overflowing leaves and thus integrated the motif of the vase of plenty (purna ghata or purna kalasha), an ancient auspicious symbol in Hindu architecture. The tree columns carried the baldachins of the thrones of Shah Jahan, which had a curved organic roof, called a bangla, and together they formed an artificial bower and were thus the “signifiers” of “the artificial garden,” of a new architecture with naturalistically sculpted leaves, carved and inlaid and painted flowering plants, and marble pools and channels. The artificial garden was the imperial garden, permanent and above the laws of nature, and, as we can deduce from analogous metaphors in court poetry, celebrated Shah Jahan as spring in the age of mankind. The palace of the king was a garden that symbolized the good government of Shah Jahan, who brought forth everlasting bloom in Hindustan (fig. 9.18). To complete the iconographic program, the palace buildings were furnished with carpets and other textiles showing flower designs, and within the halls the emperor and his court walked around dressed in flowered garments, which had become the court fashion by the time of Shah Jahan, sublimating the moving flowerbeds of Jahangir to court practice.

The political message of Shah Jahan’s new plant vocabulary, made all the more persuasive by its seductive aesthetics, was so powerful that it led to a floralization of all later Mughal architecture and to a wide acceptance of the organic architectural forms in all types of buildings and in all parts of India. Thus, what had begun as the most unorthodox of Mughal garden types had, in the last analysis, the greatest impact.

NOTES

This essay was originally published under the title “My Garden Is Hindustan: The Mughal Padshah’s Realization of a Political Metaphor,” in Middle East Garden Traditions: Unity and Diversity, ed. Michel Conan (Washington, D.C.: Dumbarton Oaks, 2007), 158–75, © 2007, Dumbarton Oaks Research Library and Collection, Trustees for Harvard University. Since the issue under consideration shows remarkable analogies with what happened in the Mannerist gardens of Europe, I am republishing it here with some revisions as a contribution to the discussion of the connections between Islamic and Renaissance gardens. I thank Harvard University Press for allowing me to republish the article, of which I have changed the title and to which I have added an introduction, a conclusion, and some additional material. I have also updated several references. I prepared the revision of the article in the context of my project “The Palaces and Gardens of Shah Jahan” (r. 1628–58) (project number P 21480), which was supported by the Austrian Science Fund (FWF) and which I carried out as a senior researcher at the Institute of Iranian Studies of the Austrian Academy of Sciences (2009–14).


2. Ebba Koch, “The Baluster Column—a European Motif in Mughal Architecture and Its Meaning,” Journal of the Warburg and Courtauld...

4. This is a term Thomas DaCosta Kaufmann used in our correspondence in late December 2014 about periodizations of art history, especially regarding “Mannerism” and “Baroque.” Sanjay Subrahmanyan uses a similar expression when looking at phenomena linking different parts of the world in the sixteenth century; he speaks of the power of synchrononicity and synergetic cultural and material processes in different societies. See Sanjay Subrahmanyan, Explorations in Connected History: From the Tagus to the Ganges (New Delhi: Oxford University Press, 2005), especially 134–37.

5. For a fuller discussion, see Ebba Koch, “The Mughal Garden: Type, Form, and Function,” in The Islamic Garden, ed. Attilio Petruccioli (forthcoming).


10. This leaves us with the dilemma of whether to apply the term; see D. Fairchild Ruggles, “Humayun’s Tomb and Garden: Typologies and Visual Order,” in Gardens in the Time of the Great Muslim Empires, ed. Petruccioli, 175. I am inclined to do so while specifying the particular form.


12. The architectural vocabulary of the Mughal chaharbagh can be established from surviving gardens seen together with their descriptions by the historians of Shah Jahan, such as Muhammad Amin Qazvini, ʿAbd al-Hamid Lahauri, and Muhammad Waris in their official chronicles of the emperor’s reign; they followed the directions of the emperor, who wanted to have his buildings described in precise architectural terminology. The elements comprise paved walkways (khâyban), which create subdivisions in the form of parterres (chahar); garden pavilions (ʿimarat, nashimān); and pools or tanks (bāzū) sunk into a platform (chahubat[a]n). The walkways may contain sunken channels (nahār). At the points where the walkways meet the garden wall (divār) may be placed real or false gateways (darvaza). The garden is enclosed by a wall (divār) with towers (būr) at its corners. The terrace garden has in addition a series of terraces (martaba), waterfalls (absār), often in the form of a thin sheet of water (chādar) falling straight down in front of a wall. The wall contains registers of small niches (taqcha, chini khana) in which, during the day, small flower vases are placed, and during the night, candles, both producing a charming effect behind the sheet of water. Another variant of a waterfall is a textured stone slab, usually with a fish-scale pattern, termed māḥi pushṭ. Abshar, chadar, taqcha, chini khana, and textured water chutes may also occur on a smaller scale in the cross-axial chaharbagh and the waterfront garden. For a fuller discussion, see Koch, “Mughal Garden.”


17. We have to rely here mainly on the preserved evidence and the court historians, who are our principal source on the deeds of the emperors. How far the nobility wanted or was allowed to follow is, for lack of evidence, almost impossible to establish. The only example I am aware of is Shah Budagh Khan’s Nilkanth at Mandu, discussed below.


Even in darbar or court reception scenes the emperor may show himself in the lotus position; see, for example, an illustration from the autobiographical history of his reign, the Jahangirnama, in Barbara Schmitz and Ziyaud-Din Desai, Mughal and Persian Paintings and Illustrated Manuscripts in the Raza Library, Rampur (New Delhi: Aryan Books International, 2006), pl. 3.

20. In this article, in double dates separated by a backslash, the first date is according to the Hegiran (Hijri) calendar, followed by most Muslims the world over. Since the Hijri calendar is a lunar one, it moves against the solar year, and thus usually corresponds to parts of two solar years.


22. When I last visited the garden in March 2003, the large pool was used as a latrine by the villagers!


24. Babur, Babur-Nama, 606; Babur, Bâburnâma, 722–23. This is my reading of the passage; Thackston translates it somewhat differently, but the idea of the rock-cut house is there.


26. Qur’an 56:11ff. promises believers that in the paradisiacal gardens they will be served drinks that will not bring about hangovers.

27. Charles Masson was the pseudonym of James Lewis, who deserted to Kabul in November 2005, I was not able to ascertain whether the Mughal monasteries are kept at the British Library, Rampur


29. Schmitz and Desai, Mughal and Persian Paintings, pl. 7; Koch, “My Garden Is Hindustan,” fig. 17.


32. Ebba Koch, “The Delhi of the Mughals Prior to Shahjahanabad as Reflected in the Patterns of Imperial Visits,” in Koch, Mughal Art and Imperial Ideology, 169, also 165, 167.

33. The Mughal chronograms are worked out according to the arrangement of the Arabic alphabet called abjad, which gives each letter a numerical value.


40. The translation is from Jahangir, Tuzuk-i Jahangiri, 1353, with comparisons to Jahangir, Jahangirnama, 208; See also M. A. Alvi and A. Rahman, Jahangir: The Naturalist (New Delhi: National Institute of Sciences, 1968), 119.

41. Schmitz and Desai, Mughal and Persian Paintings, pl. 7; Koch, “My Garden Is Hindustan,” fig. 17.


43. Jahangir, Tuzuk-i Jahangiri, 1:360; Jahangir, Jahangirnama, 211.


45. See also Jahangir, Tuzuk-i Jahangiri, 2:31; Jahangir, Jahangirnama, 273; cf. Robert Skelton, The Indian Heritage: Court Life and Arts Under Mughal Rule (London: Victoria and Albert Museum, 1982), 26 with an illustration. The white marble tablet with the inscription is today in the

47. Jahangir, Tuzuk-i Jahangiri, 2:8; Jahangir, Jahangirnama, 26; Jahangir, Jahangirnama, 6.


50. For a more detailed discussion of this issue, see Ebba Koch, "Jahangir's Elephants: Monumental Sculpture for a Mughal Padshah," in On Iconography in Islamic Art, ed. Markus Ritter (Berlin: De Gruyter, forthcoming).

51. Babur, Babur-Nama, 609.


56. Jahangir, Tuzuk-i Jahangiri, 1:103–04; Jahangir, Jahangirnama, 75. So far I have not been able to find out whether this sculpture survives.

57. Tirmizi, Ajhmir Through Inscriptions, 32.

58. Jahangir, Tuzuk-i Jahangiri, 2:181; Jahangir, Jahangirnama, 350. During a field trip to Jammu in February 2016 I was able to ascertain that the elephant statues still exist, though I was not permitted to reach them because they are in the military zone right on the border between India and Pakistan. I was, however, kindly provided with photographs by the webmaster of the Indian Army, one of which is reproduced here as fig. 9.14. For a detailed discussion of the elephant statues, see Koch, "Jahangir's Elephants." My observations are based on the reports of Shastri and Kak cited below (see fig. 9.13) and the photographs of the elephants of 2016 (see fig. 9.14).


60. Jahangir, Jahangirnama, 434.

61. The reading of the inscription is that of H. Shastri, Annual Progress Report of the Archaeological Department, Jammu and Kashmir State, for the Vikrama Year 1974 (A.D. 1917–18) (Jammu: Alim Chand, 1919), 3. Since my first publication of the elephants in Koch, "My Garden Is Hindustan," figs. 14 and 15, I was able to find a photograph of the inscription which was taken in the Shri Pratap Singh Museum by the Indian National Trust for Art and Cultural Heritage (INTACH) Jammu & Kashmir Chapter. I am very grateful to architect Sameer Hamdani of intach for tracing the photograph in the archive of INTACH and providing me with a scan. For a reproduction and a discussion of the inscription, see Koch, "Jahangir's Elephants."


64. I have previously drawn this comparison in Koch, Mughal Architecture 86, and Koch, “Mughal Waterfront Garden,” 186.


67. My attention was drawn to the Ort Farnesiani by the anonymous reviewer of my article, whom I thank for this and several other thoughtful observations and suggestions which helped me clarify the connections I see between the Mughal and the late Renaissance garden.


70. Van der Ree, Smienk, and Steenberg, Italian Villas and Gardens, 75–81.

71. For illustration, see fig. 6.12 in this volume.

78. I owe the latter observation to my insightful copy editor, John Morris.
81. Koch, “Jahangir as Francis Bacon’s Ideal.”
82. Koch, Jahangirnama, 1:200–201; Jahangir, Jahangirnama, 125.
84. Historisches Museum Basel HBM Inv. No. 1904. 477. The hazelnut is listed in the inventory of the Amerbach-Kabinett, part of which was integrated into the Historische Museum. I thank Raphael Beuing, who was curator at the museum when we saw the hazelnut there in October 2011, for the information about provenance, and Daniel Suter, director of the library of the museum, for the photograph and further information as well as the permission to publish it.
85. Subtelny, Le monde est un jardin, 103–6 and 58–65 passim.
86. Jahangir uses the Hindi/Urdu term gul kaner, which is oleander, Nerium indicum Miller or Nerium odoratum Sol.
88. Ahmad Gulchin Ma’an, ed., Tazkira-i Mai-khana Compiled by Mullah ‘Abd al-Nabi Fakhr al-Zamani Qazwini in 1028 Hijri, 6th ed. (Tehran: Eqbal, 1997), 566, right col., line 16. I thank Dr. Yunus Jaffery for drawing my attention to this text and Emma Flatt for making it accessible to me.
89. Jahangir, Jahangirnama, 72; Jahangir, Tuzuk-i Jahangiri, 1:99.
93. In several previous studies, I have identified the baluster column, the bangla roof, and the plant forms of the architecture of Shah Jahan as symbols of rulership; for the gist of the argument, see Koch, “Mughal Palace Gardens,” 225–28. In this I am followed by Catherine B. Asher and Cynthia Talbot in India Before Europe (Cambridge: Cambridge University Press, 2006), 200.
94. E.g., Beach and Koch, King of the World, cat. nos. 19, 39.
Any engagement with other cultures, whether past or present, is an act of interpretation and translation. It involves a selective appropriation of texts, artifacts, technologies, plant materials, and artistic forms, which, in order to retain their particular resonance, need to find a place among the traditional practices and values (or within the system of categories) characteristic of the adoptive culture. This process of transmission could be slow or sporadic, as demonstrated, for example, by the uneven spread of Western military technologies—firearms, closed formations, and angle-bastion fortifications—among the Eastern powers during the seventeenth and eighteenth centuries. Yet, irrespective of its success or failure, the incorporation of new ideas and objects into an established outlook and lifestyle is an effective means of negotiating individual or collective identities and a fundamental mode of the generation of culture as a form of dynamic adaptation to the changing global environment.

The creation of Italian Renaissance gardens is usually seen as part of a larger humanist project of reviving the culture of antiquity through the use of specific iconography, subjects, and decorative motifs. This diachronic transmission could take the form of a textual enquiry or an archaeological quest, both of which, by peeling off layers of the more recent past, sought to reveal traces of Roman civilization. Accordingly, the outcome of this search ranged from generic evocations of ancient garden or building types—such as artificial islands in the middle of large fishponds, echoing the design of the so-called Teatro Marittimo in Emperor Hadrian’s (r. 117–38 C.E.) villa at Tivoli—to fairly literal reconstructions. One might recall, for example, a dining table with a channel of running water in the Villa Gambara (now Lante) at Bagnaia (fig. 10.1), a likely reference to the analogous device described in a letter by Pliny the Younger (61–c. 113 C.E.), or tree houses in the Medici villas at Castello and Pratolino (fig. 10.2), probably
inspired by a similar structure erected for the entertainment of Emperor Caligula’s (r. 37–41 C.E.) guests and recorded by Pliny the Elder (23–79 C.E.) Such instances of cultural appropriation, however, invariably involved the adaptation of ancient models to contemporary realities. Caligula’s banqueting plane tree, for example, became an oak—a variety more common in Tuscany—fitted with hidden spouts to drench unsuspecting visitors, while the Fountain of Deluge, the first in the narrative sequence of the waterworks at Bagnaia, evoked associations with Noah’s flood rather than bringing to mind the mythological story of Deucalion and Pyrrha.

A different situation is when cultures involved in this kind of dialogue are contemporaneous and routinely come into contact with one another. Here, too, the danger is to see their interaction as a linear process based on the principle of direct emulation, which implies a relationship of disparity, an exchange between unequal partners. A well-known instance of such reasoning is the importance attached to a detailed description (May 31, 1526) of the water stairway in the fourteenth-century Islamic garden of Generalife in Granada, written by the Venetian diplomat Andrea Navagero (1483–1529) and published in 1556 and again in 1563. This letter is usually seen as the main source of inspiration behind the creation of analogous devices in mid-sixteenth-century Italian villas. While a number of notable similarities—especially the use of banisters with a chute for running water in the stairs flanking the Fountain of the Dragons (c. 1568–72) at the Villa d’Este at Tivoli (fig. 10.3)—give credence to this connection, the role of Navagero’s letter as an intercultural medium is by no means certain. Its very publication thirty years after the author’s visit to Generalife, in fact, might equally well mean that it reflected the emerging interest in such ekphrastic texts during the 1550s–60s, in response to the significant advances in the design of garden waterworks that Renaissance Italy had seen during the intervening period.

Although integral to this synchronic transmission, limited exposure to other cultures through travel, observation, and description cannot be taken as a sufficient condition for the enthusiastic appropriation of foreign artistic trends. Just as the creation of pleasure gardens was a response to specific physical, social, and intellectual demands, so the adaptation of new forms and motifs in the design of Renaissance villas required more than mere fascination with the achievements of the Islamic civilization. Such borrowings generally presupposed shared modes of cultural consumption among the ruling elites, as manifested in the parallel notions of value and prestige and the analogous strategies of self-representation. They also reflected deeper, more gradual shifts in hydraulic technology, medical theory, and horticultural practice, as exemplified by the acclimatization and propagation of rare, exotic, or particularly desirable plants and the new methods of managing and displaying water.

The purpose of this concluding chapter is twofold. First, it adds further emphasis to some of the principal themes developed in this volume, especially the role of intensive material and botanical exchange in perpetuating a formative dialogue between European and Middle Eastern garden traditions during the sixteenth century. Second, it offers a fresh perspective on the effects of these interactions in the longue durée, urging a critical rethinking of the standard portrayal of Italian Renaissance gardens primarily as a response to antiquity. It tackles this ambitious task, in part, by switching the focus from individual instances of artistic appropriation to more fundamental, although perhaps less obvious, changes in the area of horticulture. By reversing the accents from diachronic to synchronic transmission and from artistic to botanical exchange, this chapter therefore
seeks to demonstrate the enduring influence of the Middle East in shaping the very character of Italian gardens throughout the early modern period.

Agents of the “Global Renaissance”?

The subject of international exchange as a driving force behind the formation of Renaissance culture came into prominence in the 1990s. Notably, it was theorized in the writings of Lisa Jardine, who fixed the conception of early modern Europe as advancing through productive encounters with its neighbors. The chief outcome of these contacts was a steady inflow of commodities as a precondition of social and intellectual revival. Material exchange, in other words, started to be seen as the principal medium of the cultural transformation that Europe underwent in the fifteenth and sixteenth centuries—as suggested, for example, by the title of Jardine’s book *Worldly Goods: A New History of the Renaissance* (1996). Similarly,
By reminding us that the stimuli for cultural renewal cannot lie exclusively in the past, this approach to cultural history was partially a reaction against the traditional construction of the Renaissance as self-generating and monolithic, developed in Jacob Burckhardt’s *Die Kultur der Renaissance in Italien* (1860). At the same time, Jardine’s enthusiastic endorsement of the early modern obsession with commodity culture mirrored, in reverse, John Berger’s classic analysis (1972) of the relationship between oil...
painting and the display of property ownership, written in the aftermath of the political upheaval of the late 1960s. If Berger, in a characteristically Marxist vein, saw much of sixteenth- and seventeenth-century art as a means for the privileged to assert their purchasing power, to Jardine this emphasis on materiality celebrated the emergence of a more open, entrepreneurial, and inclusive world. Her Renaissance was therefore globalized, consumerist, multiculturalist, increasingly secularized, and market-driven, being, in other words, strikingly similar to an idealized vision of her own burgeoning corporate society and culture at the turn of the twenty-first century.

Viewing trade as the main mechanism and the basic model of synchronic cultural transmission, Jardine analyzed early modern material exchange almost exclusively in commercial terms. In this context, while embodying the spirit of adventure and the glamour of riches, the pivotal figure of the merchant became associated primarily with the generation of wealth. Yet, although mercantile operations enabled worldwide circulation of lucrative or desirable objects—from spices, porcelain, tapestries, and weapons to books, prints, and natural curiosities—Renaissance merchants had broader agendas and more diverse social functions than this picture suggests. Moreover, their motivation was not
always commercially driven. Despite the global scope of their business activities and aspirations, their fundamental interests remained predominantly local, being characterized by a strong attachment to their homeland.11 This sense of identity—which for sixteenth-century Italians was still narrowly defined by their place of origin (patria) rather than conceived in broader linguistic or geographic terms—directed their energies toward ensuring the prosperity, beauty, and prestige of their native cities. The result was a flourishing urban culture, where the surplus of wealth generated by manufacture and trade was not only spent on the consumption of artworks and luxury goods, but also became invested in various building projects, among which gardens were increasingly seen as markers of civic benefaction and personal and family splendor.

Writing in the last decade of the sixteenth century, horticultural theorist and practicing gardener Agostino del Riccio (1541–1598) commented on the profound changes he witnessed over his lifetime in the composition of garden plants growing in his native Florence. This transformation, he believed, was primarily due to the activities of local merchants, who tried to bring home everything of beauty or value—di bello o di buono—that they came across on their travels abroad (fig. 10.4).12 Such imports included the odorous and delicate *gelsomino di Catalonia* (Catalonian jasmine, *Jasminum grandiflorum*), originating in South Asia, and different varieties of lemon and orange trees, some of which were received directly from China.13 Even the name of tobacco when it was introduced to Florence in the sixteenth century was *erba tornabuona*, referring to a distinguished merchant family, the Tornabuoni, that had reputedly brought it from the New World.14 Many of these plants, and especially different varieties of flowers, however, usually found their way to Italy through the Levant, where they had been cultivated for many centuries.

Florentine merchant communities (*nationi fiorentine*) established in Constantinople, Alexandria, Ancona, Venice, Rome, Naples, Lyon, Antwerp, and Palermo15 were instrumental in channeling this traffic, with their official representatives (*consoli*) occasionally acting as brokers who helped procure and dispatch the requested specimens, seeds, and bulbs.16 Not all of this exchange took place as commercial transactions. Many “marvels of nature”—such as rare birds and mammals, mineral samples, exotic artifacts, and poorly known species of plants—reached Europe as gifts and continued to circulate in this form as they became customary in princely aviaries and menageries, cabinets of curiosities, and botanical gardens. The practice of giving and receiving such offerings was an integral part of early modern social, political, and scholarly culture. Although typically piggy-backed on the operation of mercantile networks through the use of the same trade routes and the means of communication and transport, gift exchange formed a parallel yet complementary economy, which allowed the worldwide traffic of articles that could not be commodified due to their unique or peculiar nature or limited supply. In this way, while closely linked to the commodity market, it enabled the procurement and circulation of plants, animals, and naturalia that were not readily available through regular commercial channels.

**Nature Through the Lens of Collecting**

For the objects involved in this material exchange, the sixteenth century marked an important watershed that ended the predominance of the Mediterranean in channeling commercial traffic. The region’s gradual marginalization was due to the reconfiguration of the principal trade
10.4 Claude Lorrain, Landscape with Merchants, c. 1629. National Gallery of Art, Washington, D.C. Samuel H. Kress Collection, 1952.5.44. Note the ceramic vases with plants and flowers stacked among various merchandise.
routes, with the center of gravity slowly shifting toward the Atlantic. As a result, European merchants and princes increasingly turned to the Americas in search of new commodities and resources. These seemingly unlimited opportunities also signaled a fundamental paradigm shift, with Europe no longer having to measure itself exclusively against the legacy of antiquity or the fabulous riches of the Orient. Besides, the discovery and exploration of two new continents, with their unique flora and fauna, opened a previously unknown chapter of natural history, which had to be carefully pieced together from the abundant yet haphazard evidence that was finding its way into European hands. A direct consequence of this enquiry was the growing importance attached to the cultivation of exotic plants, which—being ascribed, often arbitrarily, powerful healing properties—soon became much sought-after objects of collecting.

The arrival of plants from the New World, however, was uneven and sporadic, as were the attempts at their acclimatization. In 1547–48, for example, Duke Cosimo I de’ Medici (r. 1537–74) experimented with the cultivation of maize—*grano d’India* or “Indian corn,” referring to its origin in the West Indies—in the garden of his villa at Castello near Florence. The duke, who took a substantial interest in natural history, had also successfully managed to grow from seed a *guanabano* tree (soursop, *Annona muricata*), although it later died because of negligence or lack of proper care. In general, however, such imports from the Americas could not compete with the steady traffic of plants from the Middle East; and, in the final analysis, they did little to change the character of Italian agriculture or gardening until the mass introduction of potatoes and tomatoes through the efforts of late eighteenth-century agronomists.

It is therefore significant that Luca Ghini (1490–1556), a leading naturalist active in Tuscany, continued to look to Venice as the main intermediary for obtaining rare plants for his botanical garden—the forerunner of the present Orto Botanico—founded in Pisa at Cosimo’s behest in 1545. Ghini’s acquisitions included *colocasia* (taro, *Colocasia esculenta*), originating in Southeast Asia, and *stirace* (styrax, *Styrax officinalis*), which he received from Crete, a Venetian possession throughout the sixteenth century.

The founding of botanical gardens is often misleadingly described as a conscious re-creation of the terrestrial paradise, a frustrated attempt to bring together all known plants to capture the boundless variety and richness of nature. Originating as functional enclosures for cultivating medicinal herbs, these institutions developed by the middle of the sixteenth century into key sites for practicing natural history, a branch of knowledge that encompassed the modern
sciences of botany, mineralogy, and paleontology. Unlike its sister natural philosophy, this was largely a descriptive discipline that relied on recording and classification rather than observation and experiment, being intimately linked to the practice of collecting. What gave this vast field of enquiry overall unity was the framework of medical theory, which, under the influence of the teaching of Paracelsus (1493–1541), encouraged the use of powdered mineral and organic substances—such as bezoar stones and rhinoceros horns—\(^{23}\) in combination with the traditional Galenic herbal preparations. The result of this scholarly approach was a new mode of display, where botanical gardens and cabinets of curiosities were typically conceived in close physical proximity to one another, bringing diverse facets of nature into a comprehensive system of representation and classification.

A paradigmatic example of this arrangement was the intended, but only partially realized, layout of the Orto Botanico in Padua, a university-managed botanical garden created under the patronage of the Venetian Republic (fig. 10.5). It occupied a vast circular space divided into four square compartments by two main alleys that crossed in the middle. Along the perimeter, this area was to be surrounded by a ring of buildings that were supposed to house foundries, distilleries, and other workshops as well as collections of “mineral and soil samples, rocks, and precious gems”; desiccated fish and other marine creatures and objects (such as salts, sponges, and corals); and stuffed animals and birds.\(^{24}\) Within this compartmentalized, static “theater of nature”—where individual rooms, cabinets, drawers, and shelves approximated chapters, sections, and entries of a giant encyclopedia—the botanical garden as a collection of living plants occupied a privileged central position as the nucleus of the whole scheme. One can only speculate whether its fourfold layout had anything to do with the contemporary Karabali Garden in Istanbul, also circular and atypically based on the Persian chaharbagh plan;\(^{25}\) but the “microcosmic” richness of the Topkapi Palace—similarly expressed through the physical interlocking of gardens and collections of artworks and naturalia—certainly paralleled this sweeping mode of display.\(^{26}\)

By the second half of the sixteenth century, the use of plants as a means of self-representation—bringing to mind a well-known image in the Topkapi Palace Museum of the hefty figure of Sultan Mehmed II (r. 1444–46, 1451–81) sniffing a delicate rose—was increasingly shared by both Ottoman and Italian elites (fig. 10.6). In Italy, it was evidenced by the proliferation of private botanical and flower gardens. Most of them were attached to nonresidential
pleasure houses known as *casini di delizia* and usually located within close reach of the main palaces of their owners. A typical example of this combination was the Vatican botanical garden founded by the papal physician Michele Mercati (1541–1593) next to Pirro Ligorio’s Casino of Pius IV (1558–61) (fig. 10.7). Later engravings show its layout composed of four rows of trapezoidal compartments radiating from the Casino’s nymphaeum and planted with herbs, shrubs, and exotic trees. In Florence, a small botanical garden that Grand Duke Francesco I (r. 1574–87) created in 1577–78 in the courtyard of the Casino of San Marco in the northern part of the city was rivaled, among others, by the rich collections of living plants assembled by the noblemen Niccolò Gaddi (1537–1591) and Antonio Salviati (1554–1619). The location of Gaddi’s *casino* opposite his old family palace in Piazza della Madonna degli Aldobrandini struck a note of extravagance. His garden, overlooked by a gallery (*galleria*) decorated with fashionable paintings and antique sculpture, housed an impressive variety of plants acquired from regions geographically as distant as Egypt and northern Europe. These specimens included the coniferous *pezzo* (Norway spruce, *Picea abies*), the Anatolian *lauro regio* (cherry laurel, *Prunus laurocerasus*), the English *uva spinà* (gooseberry, *Ribes uva-crispa*), and the deciduous *scotano* (smoke tree, *Cotinus coggygria*) and *albero di Giuda* (Judas tree, *Cercis siliquastrum*). As for Salviati, he especially cherished his collections of flowers and rare medicinal herbs, a consignment of which he received in 1584 from Istanbul through the agency of Marcilio degli Albizzi, consul of the Florentine merchant community in Venice.

Both Gaddi and Salviati also possessed cabinets of curiosities located in their studies (*scrittoi*), which, among more customary articles, featured a number of foreign artifacts. The incorporation of these objects that were primarily of

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10.7 View of the Vatican gardens showing the Casino of Pius IV and the botanical garden. From Giovanni Battista Falda, *Li giardini di Roma con le loro piante, alzate e vedute in prospettiva* (Rome, 1680). Courtesy Dumbarton Oaks Research Library and Collection. Only three instead of four rows of compartments are represented so that the composition does not look overcrowded.
ethnographic interest into the established matrix of collecting—justified by their particular material or technique of execution—served to diffuse the boundaries between works of art and “wonders of nature,” giving a greater sense of unity to the overall display. Gaddi, for example, owned an ancient Egyptian alabaster vase and an “Indian straw bed,” described as a net woven from multicolored ropes—presumably a hammock of the kind still produced in Central America. Likewise, Salviati in his casino in Borgo Pinti kept a pair of shoes made from agave leaves, similarly representative of the flora and crafts of the New World. Analogous objects, surprisingly, also managed to find their way into university collections. Their presence is attested by various items of Ottoman footwear (including leather boots and gilded slippers), small purses, turbans, and other “Turkish” paraphernalia that the Franciscan Francesco Malocchi (d. 1613)—a busy plant and curiosity hunter in the Medici employ—procured in 1603 for the museum (galleria) of the Orto Botanico in Pisa.

The Three Garden Revolutions

The very multiplicity of this material and botanical exchange—as conveyed by the documentary evidence that breaks it down into myriads of objects, letters, transactions, and movements—makes it hard to perceive the long-term outcomes of this quest for the novel, the prestigious, and the curious. Perhaps the best way to grasp the broader picture is by comparing two literary descriptions of a fictional garden envisioned by Giovanni Boccaccio (1313–1375) and reimagined by another Tuscan writer, Bastiano de’ Rossi (fl. 1584–1605), almost 150 years subsequently. Boccaccio set his Decameron (1353) in a villa north of Florence, where his narrators escaped the terrible plague of 1348. Their pastime was mostly spent in a walled garden with paths shaded by grapevine-covered pergolas and bordered by rose and jasmine bushes, at the center of which lay a spacious lawn dotted with wildflowers and surrounded along the perimeter with citron and orange trees. De’ Rossi’s deliberate evocation of Boccaccio’s locus classicus in his account of a theatrical interlude performed during the Medici wedding of 1589 highlights the subtle yet profound changes that this notional yet paradigmatic setting had undergone during the intervening century and a half. Although retaining its basic layout, the garden was now dominated, both in visual and olfactory terms, by citrus trees—not only citrons and oranges, but also notably lemons—whose overwhelming scents were ingeniously conveyed on stage by spraying distilled essence. By contrast, multicolored roses were relegated to the interior of geometric compartments, whose outlines were defined by hedges of odoriferous shrubs occasionally interrupted by large vases of aromatic herbs and Catalonian jasmine.

The arrival of citrus trees, and especially lemons, at the center stage of Italian gardening was a slow and gradual process. Although citrons were cultivated by the ancient Romans, who knew their culinary and medicinal uses, the spread of other citrus varieties throughout the Mediterranean is generally associated with the Arab expansion. These plants became increasingly familiar in Italy in the aftermath of the Crusades, especially from the early fourteenth century onwards. Sweet oranges continued to be a relative rarity even during the later period; they appear, for example, as luxury symbols in the background of Jan van Eyck’s Arnolfini Portrait (1434) in the National Gallery, London, which represents a Tuscan merchant and his wife resident in Bruges. Limited quantities of bitter orange, citron, and lemon trees grew in the 1440s and ’50s in the Medici gardens at Careggi and Fiesole. The sudden proliferation of these plants by the middle of the sixteenth
century—especially along the coast of Liguria, on the shores of Lake Maggiore in Lombardy, in the areas north and south of Naples, and all over southern Italy—was not only a felicitous case of climatic adaptation, but nothing short of a true horticultural revolution that once and for all transformed the very character of Italian gardens.

In the context of garden design, the introduction of citrus trees allowed a substantial expansion and enrichment of the coherent but restricted ancient Roman palette, which was essentially limited to native plants, such as box, laurel, myrtle, rose, oleander, and cypress. Odorous and flavorful, although demanding and capricious, numerous varieties of lemons, oranges, and citrons continued to exert an extraordinary spell during the rest of the early modern period (fig. 10.8). A clear sign of the growing demand for these plants in the second half of the sixteenth century was their commercial cultivation. In Florence, for example, they were reared for profit by the female monastic communities of Santa Felicita, Santa Maria Nuova, and Santi Salvatore e Brigida (better known as Paradiso). The peak of citrus popularity, however, occurred in the seventeenth century, when a mere fascination with the delicious aromas, delicate blossoms, and juicy fruit of these plants turned into a real obsession. An eloquent testimony to this overriding passion is a frescoed medallion painted by Ciro Ferri on the ceiling of the Sala di Saturno (1665–67) in the Palazzo Pitti in Florence. It represents the aged Persian king Cyrus III the Younger (d. 401 B.C.E.)—a paragon of the sagacious ruler and ardent horticulturist—striking a slightly grotesque pose to water, with notable caution, a robust orange tree from an enormous jug (fig. 10.9).

The irrigation of these plants has indeed posed new challenges, bringing about a fundamental rethinking of the role of water in Italian Renaissance garden design. Ancient and early modern agricultural theorists traditionally recommended manual watering techniques, which involved various methods of soaking and dripping; running water was generally to be avoided due to the soil erosion that it was likely to cause. What a typical fifteenth-century garden needed was a well with an adjacent trough, which allowed warming up water in the sun and mixing it with the essential fertilizer, manure. Because of their relatively shallow root systems, however, citrus trees required regular irrigation—usually twice daily, early in the morning and after sunset—making, by the middle of the sixteenth century—especially along the coast of Liguria, on the shores of Lake Maggiore in Lombardy, in the areas north and south of Naples, and all over southern Italy—was not only a felicitous case of climatic adaptation, but nothing short of a true horticultural revolution that once and for all transformed the very character of Italian gardens.

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century, the introduction of fresh aqueduct water in Italian gardens a pressing necessity.

The harnessing of running water in the garden context opened up further possibilities for its artistic manipulation. Mid-sixteenth-century waterworks included not only fountains and grottoes that could be powered by refillable cisterns, but also nymphaea, fishponds, and cascades—in short, the whole range of elaborate *giochi d’acqua* that became synonymous with the Italian Renaissance garden experience. These achievements in the area of hydraulics also revolutionized design, making water a dynamic force that helped unify multiterraced layouts in both narrative and aesthetic terms. The terraces of the fifteenth-century Villa Medici at Fiesole, for example, were originally conceived as physically and functionally self-contained, isolated units; the addition of the intermediary covered walkway along the blank expanse of the retaining wall was the result of twentieth-century interventions by Cecil Pinsent (1884–1963) (fig. 10.10). By contrast, the design and narrative program of the Villa Medici at Castello, begun in 1538, were organized around the passage of water: from its origin by literally oozing through the pores of the mountain deity Apennine in the garden’s upper fishpond to its triumphal eruption from the mouth of the vanquished giant Antaeus set on the main fountain. A further signal step was the idea of conducting water from one terrace to another by means of water stairs and water chains, as exemplified by the Fountain of the Dragons and the Scale dei Bollori in the

10.9 Ciro Ferri, painted medallion depicting King Cyrus III the Younger in the Sala di Saturno, Pitti Palace, Florence, 1665–67.
Villa d’Este at Tivoli (figs. 10.3, 10.11). While the relationship between these Renaissance inventions and the waterworks of Islamic Sicily and Spain still requires further investigation, the abundance of orange trees that Andrea Navagero noted in Generalife points to the parallel horticultural developments that in an indirect yet crucial way prepared the ground for such creative feats.47

A regular supply of fresh water was also essential for the maintenance of botanical and flower gardens, as in the case of the Orto Botanico of the University of Bologna, established in 1568 by the leading Italian naturalist Ulisse Aldrovandi (1522–1605). Laid out in a courtyard of the city’s Palazzo Communale, it utilized the runoff of the recently inaugurated Fountain of Neptune (1563–65). By the 1580s, however, the inclusive attitude to plant collecting inspired by geographical discoveries gradually yielded to a narrower, but equally demanding, fashion for flower cultivation. Scholars emphasized the Ottoman origins of this trend (fig. 10.12),48 which foreshadowed the later Dutch tulipomania, even though much of this traffic, especially in the early decades of the seventeenth century, had reached Italy via Flanders.49 Especially valued were the so-called double flowers, mutant varieties with additional petals that were usually propagated through cuttings. The importance attached to the ownership of these specimens is illustrated by an extraordinary story reported by the Medici...
herbalist of Flemish origin Giuseppe Casabona (alias Josef Goedenhuize, d. 1595). It concerned the adventures of a seemingly priceless double-flowered *erba trinità* (hearts-ease, *Viola tricolor*), which, being considered “unique” in Europe, came into his possession in a manner worthy of a commedia dell’arte that involved concealment and rediscovery separated by two acts of theft.50

The growing prestige attached to such rare flowers was also evidenced by their overwhelming share among the various plants that continued to be exchanged as gifts. The very first specimen that Francesco I received in 1583 from Aldrovandi to initiate their lasting relationship was *vitalba* (traveler’s joy, *Clematis vitalba*), a climbing shrub with a double scarlet-colored corolla.51 In 1585, trying to secure the favor of Cardinal Ferdinando de’ Medici (1549–1609), resident in Rome, Casabona sent to him a box of flowers including *tlaspi* (evergreen candytuft, *Iberis sempervirens*), *rosa gieldica* or *sambuco rosea* (guelder rose, *Viburnum opulus*), and two types of irises—*iris flandrica* and *iris di Damasco*—as well as double-flowered columbines, red peony, and cowslip.52 A year later, he had to dispatch another consignment to replace the peony and the guelder rose, both of which had perished the previous winter, adding some double-flowered chamomile.53 Between 1580 and 1589, Casabona also continually requested such specimens from his correspondent in
Nuremberg, the noted physician Joachim Camerarius the Younger (Joachim Kammermeister, 1534–1598), referring specifically to double-flowered chamomile, columbines, forking larkspurs, feverfews, wallflowers, cornflowers, and rose campions. Being of Middle Eastern origin, many of these flowers, however, made their way to Florence via Crete. Such imports, for example, were found in the celebrated garden of Antonio Salviati, where Levantine poppy anemones and milk-white hyacinths grew alongside fragrant jonquils (a variety of daffodil native to the Iberian Peninsula).

The prestige attached to the ownership of such plants was reflected in the increasing prominence of garden parterres as the areas where flowers were typically displayed (fig. 10.13). Planted in colorful geometric segments within intricate knot-pattern ornaments, their proliferation signaled yet another turning point in Italian garden design, exemplified by the seventeenth-century layouts of the Villa Doria Pamphilj in Rome and the papal—formerly Estense—garden on the Quirinal. Composed of formally related geometric units, they marked the changing emphasis from spatial dynamics to static geometry, as manifested, for example, in the pronounced preference for leveled ground instead of terracing and the equally significant move from thinking primarily in terms of architectural models and drawings to the production of pattern books. It is perhaps ironic that as this approach spread across Europe, flower patterns soon became replaced by the embroidery-like arrangements of box hedges and colored gravel, a formal garden style whose very sterility nonetheless left a considerable impression on the increasingly Westernized tastes of the eighteenth-century Ottoman elite.

The three revolutions that successively transformed the character of Italian gardens during the sixteenth century—the large-scale adaptation of citrus plants, the introduction of running water, and the creation of flower parterres—all took place against the background of an intensive material and botanical exchange with the Middle East. While it is debatable to what extent the outcome of these interactions could be described under the rubric of “cultural influence,” they highlight the lasting effects of
a continual dialogue between the European and Islamic garden traditions throughout the early modern period. These contacts were largely founded on a shared fascination with luxury objects and rare plants and their use as a means of self-representation by the ruling elites, whose broadly related strategies also involved the deliberate appropriation of historic landscapes—from the use of rock carvings and commemorative inscriptions by the Mughal emperors to the creation of the Orti Farnesiani on the Palatine Hill in Rome (where the princely authority of a leading member of the papal curia literally overlaid the power and glory of the emperors of antiquity). By applying a comparative method to tease out such meaningful parallels, this chapter, and this volume as whole, aims to break fresh ground by setting new agendas for future research to continue the investigation of mechanisms of cross-fertilization between different garden traditions.

NOTES

I am especially grateful to Mohammad Gharipour, without whose gentle encouragement and persuasion this chapter would have never been written. Conversations with Mirka Beneš and Raffaella Fabiani Giannetto were crucial for the formation of my ideas about the evolution of garden design in Italy, and I would like to acknowledge their intellectual contribution.


6. See the concluding section of this chapter.


13. Ibid., I, fols. 123v–124r.

14. Ibid., II, fol. 382r.

15. Florence, Archivio di Stato (hereafter ASF), Capitani di Parte Guelfa, neri, 1463, fol. 254r (c. 1568).

16. See note 34 below.

17. ASF, Mediceo del Principato, 11, fol. 88bis (unsigned note in the hand of the ducal secretary Cristiano Pagni, filled with a letter dated April 30, 1548): “Scrivere al maiordomo [Pier Francesco Riccio], che faccia sementare il campo, ch’è sotto il vivaio a Castello de’ grani d’India.” An earlier letter (August 3, 1547) from Pagni to Riccio referred to the same subject: “[In post scriptum] Il duca [Cosimo I] dice che V’[ostra] S’[ignoria] [Pier Francesco Riccio] faccia vedere in cotesti giardini di Fiorenza et all’intorno dove sien’ de’ grani d’India della sorte che son qui, et procuri d’haver le semenze, tutte o quante ne potrà havere et le conservi perché vuol veder di farne seminar’ un campo et crescer’ di mano in mano, se reuscirà. Il s[ign]or Lorenzo Riccio] faccia vedere in cotesti giardini di Fiorenza et all’intorno dove sien’


19. ASF, Mediceo del Principato, 269, fol. 18r (Francesco I to Ulisse Aldrovandi, April 7, 1566).

20. ASF, Mediceo del Principato, 1173, insert 8, fol. 395r (Luca Ghini to Pier Francesco Riccio, November 3, 1547).

21. ASF, Mediceo del Principato, 1175, insert 7, fol. 43r–v (Luca Ghini to Pier Francesco Riccio, March 8, 1549).


29. Del Riccio, Agricultura sperimentale, I, fol. 168r.

30. Ibid.

31. Ibid., II, fol. 332r.

32. Ibid., I, fol. 168r; II, fol. 365r.

33. Ibid., I, fol. 168r.


36. Ulisse Aldrovandi e la Toscana, 334 (“Itinerarium Florentiae factum anno 1586 a die 13 usque a diem 22 iunii,” section “In Domo illustri domini Antonii de Salvatiis”; “Calcei ex staminibus foliorum aloei Aegiae scarce alla apostolica nuncupati”).


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38. Giovanni Boccaccio, Decameron (Florence: Giunti, 1573), 139–40; the word aranci in this passage is likely to refer to bitter oranges (melaranci or melangoli).

39. Bastiano De’ Rossi, Descrizione dell’apparato e degli intermedii fatti per la commedia rappresentata in Firenze nelle nozze de’ Serenissimi Don Ferdinando Medici e Madama Cristina di Lorenzo, Gran Duchi di Toscana (Florence: Anton Padovani, 1589), 37 (“Intermedio secondo”).

40. Andrew Dalby, Food in the Ancient World from A to Z (London: Routledge, 2003), 88.


43. Leandro Alberti, Descrittione di tutta Italia . . . (Bologna: Giaccarelli, 1550), 11r, 13r, 191, 121r, 123r–v, 174r, 180r, 181v, 182r–v, 188v, 189r–v, 190v, 199v–200v, 210r, 213v, 401v.

44. ASF, Mediceo del Principato, 220, fol. 76r (Cosimo I to Vieri de’ Medici, January 27, 1565): “et di più vi commetiamo che ci provediate 80 melarancij per porre alla spaliera del orto”; III, 74, fol. 19l (November 8, 1572, March 5, 1574): references to “meleranci in vaseti” bought from the nuns of Santa Felicita and Santa Maria Nuova; III, 77, fol. 33r (March 16, 1576): payment for “4 meleranci et porto alori compere dalla monache di S[an]ta Felicita”; fol. 146l (May 21, 1578): payment for “spesi sino il maggio passato in 2 meleranci per il giardino che uno . . . compro dalle monache di Santa Felicita, et . . . per uno altro compro dalle monache di S[an]ta M.A Nuova.”


47. Ferrero, Lettere del Cinquecento, 143.


50. See ASP, Università di Pisa, Versamento I, 518, passim.

51. Ulisse Aldrovandi e la Toscana, 282 (Ulisse Aldrovandi to Francesco I, November 28, 1583).

52. ASF, Mediceo del Principato, 1234a, insert 2, folio not paginated (Parugio Giandonati to Pietro Usimbardi, May 4, 1586).

53. ASF, Mediceo del Principato, 5102d, insert “Maggio,” folio not paginated (Casabona to Ferdinando de’ Medici, May 10, 1586).

54. Erlangen, Universitätsbibliothek Erlangen-Nürnberg, Briefsammlung Trew, Casabona, fol. 14r (February 24, 1585: request for “[i]l seme de consolida regalis flor pleno”), 21r (February 12, 1587: “et gli prego che quanto primo me mandi il seme de consolida regalis flor pleno”), 22r (July 14, 1587: “[In post scriptum] De gratia mandatemi il seme de consolida regalis et matricaria dopie quanto prima”), 24r (November 8, 1587: “de nuovo sarà per pregardare V[ostra] S[ignoria] che me mandi quanti primo si possibile sarà gli semi de consolida regalis flor pleno[e] et alcuni altri semi de florio dopie”), 25r (January 2, 1588: asking for “una pianta de coronaria dopie, leucoio dopie, melagris, matricaria dopie, seme de tutti gli sorti dopie et de tutti colori de consolida regalis, il seme et il ciano dopie”), 30r (August 12, 1589: “Prego V[ostra] S[ignoria] caldimente che me mandi il seme de tutti le sorte aquilegie dopie et consolida regale [sic] et particolarmente matricaria dopie”), 31r (August 26, 1589: asking for “matricaria duplice et consolida regalis duplice””), 32r (December 24, 1589: asking for “tutti sorte aquilegie dopie et consolida regalis et matricaria”).

53. Del Riccio, Agricoltura sperimentale, 20, fol. 76r (Cosimo I to Vieri de’ Medici, January 27, 1565): “et di più vi commetiamo che ci provediate 80 melaranci per porre alla spaliera del orto”; III, 74, fol. 19l (November 8, 1572, March 5, 1574): references to “meleranci in vaseti” bought from the nuns of Santa Felicita and Santa Maria Nuova; III, 77, fol. 33r (March 16, 1576): payment for “4 meleranci et porto alori compere dalla monache di S[an]ta Felicita”; fol. 146l (May 21, 1578): payment for “spesi sino il maggio passato in 2 meleranci per il giardino che uno . . . compro dalle monache di Santa Felicita, et . . . per uno altro compro dalle monache di S[an]ta M.A Nuova.”

54. See ASF, Mediceo del Principato, 220, fol. 76r (Cosimo I to Vieri de’ Medici, January 27, 1565): “et di più vi commetiamo che ci provediate 80 melaranci per porre alla spaliera del orto”; III, 74, fol. 19l (November 8, 1572, March 5, 1574): references to “meleranci in vaseti” bought from the nuns of Santa Felicita and Santa Maria Nuova; III, 77, fol. 33r (March 16, 1576): payment for “4 meleranci et porto alori compere dalla monache di S[an]ta Felicita”; fol. 146l (May 21, 1578): payment for “spesi sino il maggio passato in 2 meleranci per il giardino che uno . . . compro dalle monache di Santa Felicita, et . . . per uno altro compro dalle monache di S[an]ta M.A Nuova.”

55. Del Riccio, Agricoltura sperimentale, 1, fol. 116v; on anemones, see Targioni Tozetti, Cenni storici, 275–77.

56. Del Riccio, Agricoltura sperimentale, 1, fol. 116v.

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