THE
ITALIAN RENAISSANCE
GARDEN

From the Conventions of Planting, Design, and Ornament
to the Grand Gardens of Sixteenth-Century Central Italy

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CHAPTER 4

Nature Ordered: The Design of Renaissance Gardens

In the Italian Renaissance garden, nature and order, planting and design, cannot be separated. They are interlocked in the compartments or squares that form the basic units, in trees planted in rows, in straight paths that cross at right angles and in hedges that delimit all parts and axes. The designs in compartments that are known from the sixteenth century were composed for the most part of geometric figures, those in labyrinths were based on circles and squares, and spiral paths surmounted tree houses and mounts. A Renaissance garden could be characterized above all as a geometric garden. However, since nature was understood in more than one way, different kinds of estates corresponded with the two principal views of nature. Its inherent order was represented in the geometric garden; wild and untamed nature in the park. These two extremes were not mutually exclusive: one could contain the other or the whole have aspects of each. But as distinct entities they embody different attitudes toward nature, design, and antiquity.

There is not sufficient evidence to characterize the design of fifteenth-century gardens and a development over the course of the sixteenth century can only be hinted at, but the common features that persisted throughout much of the period in both modest and grand gardens can be outlined. The most fundamental ordering elements of both early and late gardens were the compartment, as the basic unit, and geometric figures. To these were added in the sixteenth century forms specifically given authority by antiquity, such as the hippodrome and theater. All these elements subdivided the whole into units or separate parts which were defined by hedges and pergolas. The subdivision of the whole into regular units remained an essential design principle of gardens until the late sixteenth century, but how the units were organized and linked changed during that century. Another defining aspect of Renaissance gardens from early to late is a reference to antiquity in many different ways, among them interest in the natural world, topiary, tree houses, labyrinths, grottoes, and automata, also sculpture modeled on Roman types or ancient sculpture itself, and classical architectural forms. These interests climaxed in the grand gardens of the sixteenth century in central Italy with the emulation of the terraced architectural complexes of the ancients. The monumental architecture and sculpture, massive alteration of the land, and abundant supply of fresh water that characterize these gardens have few parallels in more humble ones, but other ephemeral features — compartments outlined by hedges, trees in rows, pergolas and topiary — were common to both.

Accounts of Renaissance gardens generally consider the most famous examples, particularly the surviving architectural gardens, in a chronological sequence, but these are such a small number and so exceptional that they have obscured other developments. To recover some of the other significant aspects a different approach is necessary: an analysis of individual elements, organizing principles, unifying devices, and different garden types without attempting to contain them all in a single chronological scheme. The evidence does not permit an equal
treatment of all topics, and again later examples must be used to illustrate earlier developments. With an overview of garden elements and design principles, terraced architectural gardens can then be examined as a truly distinct tradition, which shares with other gardens many of the same conventions of planting and design, but also develops them in a different direction influenced by contemporary architectural concerns. Some of these grand gardens are discussed at the conclusion of this chapter and others are given a fuller treatment in later chapters.

In gardens from the fifteenth through the sixteenth century two primary sets of concerns can be distinguished: units, compartments, separate parts that can be named, measured, and counted, enclosed and hidden spaces, and sequential experiences on the one hand; and on the other the linking of parts, axial organization, directional impulses, vistas, and unity. Until quite late in the sixteenth century these two sets of design principles remained, with neither one dominating the other. To the degree that a development in design can be traced, the evidence suggests that the evolution was not simply toward a more axial organization and unity, but rather an increasingly sophisticated relationship between the whole and the individual elements that retained a certain autonomy. Although the designs of the terraced architectural gardens tended much more toward unity by the end of the sixteenth century, the parts were never subsumed under the whole as in seventeenth-century gardens.

In order to see how these concerns functioned in the overall design, we must first reconstruct the original planting (as suggested in Chapter 2), in general terms as well as in the surviving gardens. Its loss, together with that of constructions of ephemeral materials, necessarily affects our understanding of Renaissance gardens. Although the extant gardens depend on an architectural framework, the losses and alterations have nevertheless changed our experience of the space and perception of the design. Vegetation established a central focal point, framed a major fountain, or conversely concealed one. Even subtle manipulation of the planting, such as the height of hedges, affects what we do and do not see. In some of the surviving gardens higher hedges have reduced visibility and emphasized a dominant axis more than was originally intended; in others losses of vegetation have opened up what were formerly enclosed spaces. To reconstruct the planting and its role in organizing the garden, we must examine critically two different but complementary systems of representation, visual depictions and verbal descriptions, since they select and emphasize what contemporaries considered most significant about their own gardens.

Texts from the fifteenth century and particularly in the sixteenth century stress that the order in a garden must be visible, primarily from a high spot, as the patterns in the garden of simples were best viewed from the palace windows. In the late fifteenth century, Francesco di Giorgio suggested placing a pavilion at the summit of a mound, “from which one can see and judge the whole.” But even from its highest point, the ordering of a garden through the repetition of compartments, geometric figures, ovals, and hippodromes could not be wholly perceived from within. Painted and engraved views of gardens, which date principally from the second half of the sixteenth century, such as Utens’ series of lunettes of 1599, present what is not visible from within — nature ordered through regular units. In the example of the Ambrogiana (fig. 63), begun after 1587, the order consists in four large squares with six units of boschetto behind them. The whole is measurable and finite; the parts can be counted, and because of the high point of view and tilted ground plane, the boundaries of the garden are clear. This corresponds with the reality, since these gardens did not cover huge areas, unlike many in the seventeenth century.
The painted and engraved views follow a set of conventions of representation not unique to gardens, but also a specific cultural agenda. Just as exotic planting and expensive ornamentation of ephemeral materials conveyed the magnificence of a garden's owner, so too did the ordered squares and rows of trees, manifested above all in a view of that garden. The bird's eye point of view, higher than any actual viewing spot, emphasized the regularity of the planting, the order inherent in nature revealed through the hand of the owner. If, however, the order was not quite all that it should be, then the views presented an ideal rather than the reality. The four large compartments of the Ambrogiana garden did exist, but perhaps not as perfect squares. Elsewhere Utens regularized geometric figures and shifted axes to create the desired symmetry and axial arrangement, even if the terrain or preexisting structures did not permit it in fact.

The views reveal the order in a garden through rows and squares, and they also indicate the ordering principles of design. Bilateral symmetry is most prominent among them, as at the Ambrogiana, where all the garden elements are in pairs on either side of the central longitudinal avenue. The view also emphasizes the principle that garden and residence should be created of similar units which harmonize with and reflect each other. This was already stated explicitly by Alberti in the mid-fifteenth century when he recommended that the same geometric figures be employed in the garden as in the design of buildings. Over a century later Soderini proposed a more specific relationship when he remarked that the squares in the garden should be harmonious and related in size to the façade of the house. At the Ambrogiana the four large squares of the garden,
emphasized by the pergolas that surround them, echo the four prominent corner towers of the palace. A second transverse axis joins garden and building. Symmetry, harmony between building and garden, and a biaxial composition of the whole are basic conventions in Renaissance garden design, as the emphasis on them in these views attests.

In addition to the order of the whole, representations of gardens also portray with considerable detail the various subdivisions and garden ornaments. At the Ambrogiana, the four large squares are delimited by pergolas surrounding them, within each are four smaller squares, and these in turn are composed of individual beds (fig. 25). Separate bunches of flowering plants, Ferdinando’s name inscribed in greenery, and even water channels throughout the garden are precisely described. Trees are differentiated if not always identifiable, except for the characteristic cypresses of the bosc, and in others of Utens’ lunettes topiary in different shapes and materials is depicted. These views provide a remarkable amount of information about vegetation as well as architecture and sculpture; but through distortions in scale, the details are always subordinate to the whole.

Verbal descriptions, which are available for a much longer chronological span and a wider range of garden types, record instead the visitor’s experience within the garden. They generally discuss one part after another, with little indication of visual and spatial relationships, and only rarely do they provide any sense of the whole. Like the views, however, descriptions present extremely detailed information, and sixteenth-century chroniclers are particularly preoccupied with numbers of items. For example, in Raffaello Borghini’s account of Bernardo Vecchietti’s bosc, we are informed of the number of trees that occupy each row, the number of rows, and the total number of trees. Reports of gardens present the whole as the sum of many parts, preferably measurable ones. One contemporary described the Stairs of the Bubbling Fountains at Tivoli (fig. 76) as composed of 56 steps with 22 bubbles of water on each side, which fell from piers 7 palini high, totaling 42 (sic) bubbles; and altogether there were 500 bubbles, spouts, and sources of water. The net result of this was “infinite water,” from outlets that nevertheless could be — and were — counted.

At the end of Vincenzo Giustiniani’s thoughtful account of the requirements for creating and ornamenting gardens, written about 1615–20, he explains the necessity of naming all the parts of a large garden in order to be able to discuss it. In this passage he outlines the process of naming:

If a garden is a very large one, or at least bigger than average, with a variety of avenues, open piazzas, and porticoes at the ends of the avenues, it will be necessary to give as specific a name as possible to everything, according to its qualities, ornamentation, shape, position, or other token. This is so that, when talking about the garden, everyone understands perfectly which part is meant; otherwise, there will always be confusion.

With verbal equivalents, one can list the contents of a garden, as Giustiniani proceeds to do for his own garden at Bassano, indicating not the plan, but the many avenues, piazzas, sculpture, and other ornaments that it contained. Giustiniani’s discussion is more theoretical than any of the sixteenth-century writings on gardens, but shares with them an emphasis on the individual components rather than their relationship to each other and to the whole. Throughout the Renaissance, views and descriptions together tell us what was for both owners and visitors most important about their gardens: order through regular and measurable units, and the particular components of each part.

After the compartment, geometric figures were the most important and basic
units of Renaissance gardens, whether defined by natural materials or enclosed with walls. These forms were inherent in nature, not imposed on it, as Alberti explained with the example of circles and hexagons. Appropriately therefore were geometric figures composed of herbs and flowers in beds, and also of trees, or one of the three major plantings, or even an entire garden. Alberti's brief comments on gardens in his treatise on architecture were memorized and mined for the next century and a half, including his suggestion that trees be planted with intertwined limbs in circles, semicircles, and other geometric figures. The entire passage was paraphrased by Soderini over a century later, and the recommended plantings were implemented in actual gardens. In Duke Cosimo I's renovation of his estate at Poggio a Caiano, the rectangle at the right of the palace (figs. 33 and 64), designed by Niccolò Tribolo in the late 1540s, featured an octagonal boschetto framed by low hedges as the centerpiece of the garden. Two decades later at
Petrarch, Bernardo Buonarroti juxtaposed regular and irregular forms, both in nature and art. Nature's ordered essence, an outward manifestation of nature's ordered essence, was later applied to the architecture of the order of the universe. Alberti's notion of geometry made directly out of nature, an outward manifestation of nature's ordered essence, was later applied to both an entire garden and its constituent parts. In a well-known passage of his treatise on architecture of the last quarter of the fifteenth century, Francesco di Giorgio suggested that a garden be shaped in a circle or square, a rectangle, or even a polygon. In his proposal for a palace garden, rectangular compartments are organized symmetrically around a central fountain, only for a large, or hunting park with animals. The architect's model, a more westerly design, an octagonal with a central fountain, only for a large, or hunting park from Francis Bacon's visionary conception of nature. Illustrated here, from Bacon's text.
was actually set within the remains of an ancient circular structure, the Mausoleum of Augustus, which Soderini acquired in 1549. In the great interior space, almost 289 feet (89 m.) in diameter, beds formed by radiating paths intersecting concentric circles followed the models of the garden in the Hypnerotomachia and on Francesco di Giorgio’s hemispherical mount.

The botanical garden at Padua retains its original circular form (fig. 32), but not the sixteenth-century compartments. Important to understanding the symbolic significance of the entire design, they are illustrated in Girolamo Porro’s book on the garden of 1591 (fig. 68). Although the compartments were changed from the initial program, the basic elements of the design that Porro illustrates still correspond with the description of the first scheme in 1545. The garden, a contemporary noted, was governed by such good judgment as to employ the principal geometric figures, the round, the foremost of them all, the square, divided into four squares, and the triangular, adhering to the sides of the squares. In the later project as well the vast circle of the Paduan garden contained a square, subdivided into four squares, each with a circle inscribed. The whole is an image of the divinely ordered cosmos, which through the proportional relationships of perfect geometric figures expresses visually the harmony between the microcosm (all the specimens in this encyclopedia of the natural world) and the macrocosm.

Early in the sixteenth century another configuration — the oval — was appended to the list of suitable geometric forms. Baldassare Peruzzi’s unexecuted garden design of about 1525 for Cardinal Agostino Trivulzio at Salone (fig. 69) substituted a great oval for the ideal circle. Approximately 256 feet by 165 feet (78 × 50 m.), its perimeter is defined by a wide avenue with a row of trees along
the outer border. Four semicircular exedrae extend beyond the oval, each framed with columns, or perhaps with trees, since the two cannot be distinguished in the drawing. Abutting the oval of greener, Peruzzi planned a casino with a portico, the columns of which did not follow the straight line of its façade, but rather yielded to the design of the garden and continued the arc of trees. In this simple but unusual project, Peruzzi joined the instructions of Alberti to those of Francesco di Giorgio and created the unifying oval out of both architecture and nature, columns and trees.

The oval fused building and garden into a harmonious whole, but in contrast to the circle, the oval was a directional form whose unequal axes were exploited in Peruzzi's design. By placing the casino against the broad curve of the oval rather than at its end, he contrasted the primary visual axis from the palace and the principal longitudinal axis of the garden. The two axes, like those at the Ambrogiana, yield a more dynamic whole than the circular plan permitted, while still retaining in the oval an essential characteristic of the ideal circle, that it be without beginning or end. Situated between the garden and arc of the river, the casino viewed a natural feature of the landscape on one side and a human ordering of nature on the other. Peruzzi's compatriot, the Sienese Lorenzo Donati, thought in similar terms in his project for a garden in which he specified some of the plant materials (fig. 12), dating probably in the second quarter of the sixteenth century. There the entire scheme is similarly biaxial: the principal architectural features, the casino and an exedra built into the mountain, stand at opposite ends of the short axis of the rectangle; the compartments of the garden are arranged symmetrically on either side of the long axis. In Peruzzi's oval project, a similar orientation of the building with respect to the axes of the garden is given a more novel expression.


69. Baldassare Peruzzi, Design for the Garden of Cardinal Trivulzio at Salone, c. 1525, Uffizi 453A.
Ovals soon appeared everywhere in the garden, in a lawn, a mount, fishponds, fountains, and beds of simples, sanctioned by antique precedent still visible in the remains of ancient villas on the Palatine in Rome. One of the great enthusiasts of the oval in both building and garden design was Giovanvittorio Soderini, who was an active dilettante architect. Impatient with the usual squares in gardens, Soderini encouraged instead the oval for the design of an entire estate, its palace, the conventional plantings, or an arrangement of trees. By the time that he proposed these ideas in his treatise late in the sixteenth century, he had already implemented some of them in a series of drawings, perhaps of the 1560s, which are variations on a theme of casino and garden in adjacent squares. All have a diagonal entrance at the far corner and an oval courtyard, but in the garden Soderini tried out different schemes, large square compartments, radiating segmental wedges, and oval beds (fig. 70). Concerned with both geometric figures and directional forms, he created in the design with oval beds a diagonal movement through the casino from the entrance at the lower left, past circles, curving stairs, and oval courtyard. In the square of the adjacent garden, a circle is inscribed; its semicircular projections fill the four corners and suggest diagonal axes in response to that of the casino. Radiating, almond-shaped beds and smaller ones in the corners repeat the oval of the courtyard, and their long axes reiterate the diagonal impulses in the design rather than the stasis of the circles and square in which they are contained.

In this series of drawings Soderini also envisioned his inventive designs alive with plants, about which he provided detailed information in copious notes scrawled in the margins. The dark dots around the perimeter and in the niches, he indicated, signify orange and lemon trees, plants frequently trellised on walls. The small beds in the corner niches were to contain fine herbs, which would provide an abundant quantity for one house, and which he suggested on another drawing of the series might include marjoram, basil, and tender little salad greens. The large radiating beds he left an open choice, and a related passage in his treatise indicates that his own might include hyacinth, grape hyacinth, lily of the valley, sweet-scented violet, and rose. The triangular wedges between the beds are raised plots, eight inches high, bearing vases with flowers. Among his several suggestions for the center are other typical garden ornaments, a fountain, piazza, little lawn, or little mount.

Geometric figures in Renaissance gardens had their ultimate inspiration in the architecture of the ancients and the writings of Vitruvius; other forms were also employed in the sixteenth century which referred more explicitly to antique building types used by the Romans in their gardens. All were made out of nature as well as architecture, and the terms describing them were general and sometimes interchangeable. Most vague were the designations theater and amphitheater, applied to various circular and oval forms, including the great circle of the garden of simples at Padua — whether because of its shape, grand scale, or high enclosing wall is uncertain. Inspiration for the theater or amphitheater may have come from Pliny the Younger’s description of his Tuscan villa, but not from an aspect of the garden fashioned by art. It was rather the natural surroundings that he characterized as a “vast amphitheater such as could only be a work of nature.” Another amphitheater made entirely of nature was in the Regio Parco at Turin, which was begun in 1567. A contemporary visitor described the rustic architectural order with arches and columns of branches, niches and seats for resting, and circular benches, all covered with a carpet of herbs and flowers. A very tall and straight tree served as the obelisk that traditionally occupied the center.
Hippodromes and circuses, the Greek and Roman terms respectively for the architectural setting of horse and chariot races, were inspired by their remains in ancient gardens around Rome, and above all by Pliny's Tuscan villa.25 The grounds of his garden included both a drive in the form of a circus, with topiary of box and dwarf shrubs inside, and a much grander hippodrome. Defined by plane, laurel, and cypress trees, Pliny's hippodrome contained regular plots of grass divided by paths and more box cut into various shapes. In contrast to this artful manipulation of nature, the center of the hippodrome was planted "naturally," in imitation of the open countryside. Emulating this well-known precedent, Francesco da Sangallo in his garden design of about 1525 for the Villa Madama (fig. 11) used the same hippodrome form for the colossal upper terrace planted with fir and chestnut trees. At the botanical garden in Padua, outside the principal circular garden, there was also a hippodrome, "as they used to have in the gardens of the ancients."26 Giacomo Lauro's 1616 view of the Villa Mattei (fig. 71), built in the 1580s, depicts the hippodrome-shaped lawn or prato adjacent to the casino with an obelisk in the center and a colossal bust of Alexander the Great in the stepped exedra at the far end. The prato evoked not only the nearby gardens of Cirico Matti's Roman predecessors, but also a specific site with a personal relevance, the Circus Flamininius, where the Mattei family palaces had been located for generations.27
The autonomy of individual units remained a primary design principle throughout the sixteenth century; at the same time parts were linked with dominant axes, vistas, and other means. Despite the limited evidence available, the development of some of these can be suggested, along with different concepts and uses of axial organization. Throughout the Renaissance, a central avenue traversed the garden, often covered with a pergola. In the garden of Giovanni Rucellai at Quarracchi in the mid-fifteenth century, an avenue extended through the entire garden, first covered with a pergola, then tree-lined, past three gates, and on to the banks of the Arno River, so that Rucellai could sit at supper and watch the boats going by. Alongside this avenue were distinct units, separated from each other by walls or avenues lined with tall hedges. The central axis linked distant elements visually, and from a high viewing point in the palace or on the mount, it ordered and unified the parts. Standing within the garden, however, the experience would have been of separate, enclosed spaces. Movement from one end of the garden to the other, but not excursions to either side, was encouraged by such an axis. In other gardens of the fifteenth and sixteenth centuries, central avenues, some with pergolas, functioned similarly. Even in the 1570s in the west garden of the Farnese villa at Caprarola (fig. 24), a pergola crossed the length of the garden, terminating at the grotto of the rain, its function not to unify separate parts within the garden, but to connect end points physically and visually, and to create an axis visible from the palace windows above.

In some gardens the distinctness of separate spaces was reinforced by pergolas that surrounded three or four sides of the garden, rather than covering a central avenue, and by fountains that created a central focus in an enclosed space. Rucellai mentioned no fountains, sculpture, or architecture at Quarracchi, but other fifteenth-century gardens boasted a fountain, sometimes a quite ornate one, in the center of the garden of compartments. One of the Este gardens in Ferrara was ornamented not only with a fountain, but a great structure housing it, an elaborate pavilion composed of 16 marble columns supporting a wooden ceiling with a lead roof. More modest counterparts of the pavilion at Ferrara similarly established a focal point in an enclosed area. Such a centralized space was still a basic notion of garden design in the mid-sixteenth century, as we will see in Tribolo's plan for the Boboli garden with a colossal fountain in the center of the prato.

Garden ornaments of various kinds functioned as a central focal point, or simply as isolated decorative elements, until some time in the sixteenth century when their capacity to create vistas, encourage movement, and link separate parts began to be exploited. Fifteenth-century treatises recommended sculpture, loggias, and chapels for their ideal gardens, such as the dining loggia with marble columns in the Este garden at Ferrara. In most gardens, however, even in the sixteenth century, architecture of stone must have been outnumbered by constructions of wood and vegetation, which, as in Rucellai's garden, had no apparent relationship with the design. In the early sixteenth century, gardens in Rome often housed collections of antique sculpture, for the most part in haphazard assemblies; only from the 1530s were they placed more deliberately in harmony with the design, as in a niche at the end of a view. Ancient statues then marked corners of compartments and lined paths, and soon garden sculpture served to relate separate areas visually as well as through their content. The limited evidence suggests that sculpture and fountains first centralized a regular space, later served as a focal point at the end of an avenue, and finally linked parts thematically, but not all examples correspond with this general schema.

In gardens where sculpture and fountains were used to establish vistas, they
reinforced a visual axis linking parts within the garden, not merely connecting distant ones, which seems to be a development of the sixteenth century, but not a characteristic of all gardens of that period. In some sixteenth-century gardens, a single axis dominates, but in a number of others there were two prominent intersecting axes. We have seen examples of this in Peruzzi’s garden project of about 1525 for Salone in the Roman Campagna (fig. 69), Lorenzo Donati’s garden plan of the next quarter-century (fig. 12), perhaps intended for a Tuscan site, and the Ambrogian, near Florence, in the late sixteenth century (fig. 63). The biaxial scheme in these and other gardens urges movement through the garden and encourages the experience of both length and breadth. On the other hand, there were also gardens in the sixteenth century, owned by dukes and even much larger in scale, in which the separate parts were merely juxtaposed, without an axial organization, hierarchical sequence, or symmetrical plan, in some cases due to the idiosyncrasies of the site. The garden in Urbino of Duke Francesco Maria II della Rovere in the second half of the sixteenth century hugged the city walls and occupied an irregular site with an uneven terrain. On a level terrace with a
trapezoidal perimeter, a garden of compartments was located, its symmetrical beds surrounded by pergolas on three sides. Beyond this, on a steep rise, a bosco of elm trees in rows was planted, on the far side of which more plots were later purchased. The parts were juxtaposed with no axial organization, as was typical of gardens of the region.\textsuperscript{35} The Farnese ducal garden at Parma, begun in 1561, which covered extensive grounds but was neither axially aligned with the palace nor symmetrical, included units of different dimensions and shapes, a row of compartments with designs, a large oval labyrinth, woods of oak, pine, and plane trees, and a section planted with orange trees.\textsuperscript{34}

The design of contemporary gardens on the hills overlooking the city of Rome, created by wealthy and important individuals, exhibits a primary concern with a rectilinear organization on a level terrace together with unaltered terrain on a steep slope. One of these was the Villa Mattei (fig. 71), attributed to Giacomo del Duca and begun about 1580. The original garden is now completely destroyed, and the present, more extensive grounds have been transformed into a public park.\textsuperscript{36} In the late sixteenth century, a large level area planted in compartments intersected by straight paths was supported by massive walls and stretched from the entrance gate to the casino and hippodrome-shaped prato. This level also contained a dense and irregular boschetto, planted with laurel, arbutus, olive, and other evergreen trees, at the lower left in Laura's view. On the far side of the hippodrome and casino (the top in the view) the ground fell off sharply, and on the slope was a thickly planted wood with ramps and steps providing access. Laura's representation emphasizes the flat terrace and its rectilinear organization, not any single axis, changes in level, or architectural links. In a view he engraved two years earlier, however, two axes predominated and met in the casino: the tree-lined, longitudinal avenue from the entrance, and the transverse axis across the hippodrome. Again, garden and residence were united by two prominent intersecting axes; but these did not unify all the significant ornaments, since fountains and sculpture were placed along the sides throughout the garden. Nor did stairs and ramps function as foci or emphatic features: the staircase at the far right in the view was hidden behind a pergola, and the ramps leading up to the casino were reached from stairs inside the aviaries.\textsuperscript{36} All elements in the design seem rather to emphasize the contrast between the ordered garden (the level terrace) and natural planting and terrain (the unaltered slope). To further this contrast, connections between them were deliberately hidden, which would have created a lively play between visible goals and physical access.

Other sites in Rome exploited a similar contrast. Observing this, Montaigne remarked that he had learned "how aptly art can make use of a rugged, hilly, and uneven spot; for here they derive from them charms that cannot be duplicated in our level places, and very artfully take advantage of this diversity."\textsuperscript{37} This was true as well of Cardinal Ippolito d'Este's villa on the Quirinal hill, which he began in 1550 and to which he made additions until his death in 1572. Now completely altered, its earlier state is recorded in Maggi's engraving of 1612 (fig. 72).\textsuperscript{38} Below the garden on the level terrace, from which Heinrich Schickhardt in 1600 saw a splendid view of all Rome, the land fell off steeply and was left unaltered, as at the Villa Mattei. The flat area was ordered with compartments, both square and trapezoidal, intersected by straight paths, and at the upper part of the garden in the view their low regularity was intruded upon by a boschetto. Ippolito d'Este, we have noted, spent a considerable sum on trellis constructions for this garden, and, like Mattei, on ancient and modern sculpture, fountains and their water, as well as exotic and expensive plants. Jean Jacques Boissard, a French visitor who saw the garden in 1555, considered its planting more splendid than any other in Rome:
exquisite shade trees, pomegranate, bitter orange, citron, and lemon trees espaliered on walls, various flowers, and yellow and white jasmine.\textsuperscript{39} The embellishments of both nature and sculpture made it a noble garden, one more concerned with the contrast between art and nature than with a single dominant axis, a hierarchical sequence of spaces, or architectural embellishments.

The garden of the Villa Medici in Rome (figs. 21 and 22) resembled the Mattei and Este gardens in its level terrace and arrangement in a grid pattern with two principal axes. Schickhardt observed that one avenue extended from the mount across the entire length of the garden, a prominent longitudinal avenue stretched from the street entrance through the garden of fruit trees (at the right of the palace in the views).\textsuperscript{40} Leveling the ground, building retaining walls and water conduits, constructing the mount and pergolas, delineating all the compartments with hedges, and trellising the walls with citron and pomegranate trees — these were the improvements and embellishments that Ferdinando de' Medici brought to the property he purchased in 1576, which transformed it into a modern and magnificent garden in late-sixteenth-century terms.\textsuperscript{41} A flat terrace, often a major

\textsuperscript{39} Giovanni Maggi, Villa d'Este on the Quirinal, Rome, 1612, The British Library, London.
expense, was an important characteristic of the sixteenth-century garden. The leveling of the land was essential; additional alterations and architecture were further enhancements that depended first of all on the terrain and its location. Considerable sums of money were also expended on ornaments of nature, water, and sculpture, as at the Mattei, Este, and Medici gardens in Rome in the 1550s through the 1580s. In these examples expense and prestige did not translate into architecture and terracing on a hillside, whose dominance in a few surviving examples has deflected attention from other significant features of aristocratic gardens.

Ferdinando de' Medici's renovation in 1591–97 of the Villa Petraia (fig. 73), one of his family's estates in Tuscany, included terracing the sloping site and the requisite retaining walls, although not major land alteration or architectural features, little of sculpted decoration, but extravagant constructions of greenery, and a design that had much in common with that in contemporary gardens. The new garden did not compete in fountains and sculpture with its neighbor at Castello created by Ferdinando's father, Cosimo I, since much of the water from
the spring behind Petraia had been diverted there. The palace at the summit of the hill, long pre-dating the landscaping, determined the general disposition of the garden below. The basic layout of three terraces remains: one long and gently sloping, two narrow and flat, supported by retaining walls and linked by modest staircases. There is no sixteenth-century documentation of this garden, but substantial information on its later state, which reveals that little changed for two centuries, until the replanting in a new garden style in the late eighteenth and early nineteenth centuries under the House of Lorraine.42

Later changes in planting at Petraia have removed the most salient features of its original design — symmetry and geometry conveyed through the three conventional plantings. In Utens' painting (fig. 74), the garden is laid out symmetrically on either side of the palace, fishpond, and central avenue of the hill below. Originally the central axis was not further stressed, as it is now, by a mound with a fountain; and the entrance to the palace was not on the garden side.43 On the lowest terrace the longitudinal axis was balanced by a transverse one. This axis bisected two large squares, each of which was inscribed with a great circular pergola (planted with widely spaced trees following the same arc) and subdivided into four compartments. In the corners of this terrace are boschetti, which appear to be holm oak trees in Utens' view, probably reduced in number. The holm oaks were still there in the eighteenth century, along with cypress and laurel trees; and they remain there today. The pergolas also had a long life: in 1773 it was suggested that they be removed, but the owner and grand duke of Tuscany, Pietro Leopoldo, wanted them kept.44 In the same year there were citrus trees planted within the pergolas, where Utens has painted more holm
oaks. Flowers and herbs filled the compartments flanking the fishpond (fig. 29), as they still did in the eighteenth century. On the highest terrace, on either side of the palace, Utens indicates small trees, which were surely the same citrus trees that were recorded along with the flowers in 1769.45

The garden was experienced in two typically contrasting ways: ascending from the lowest level, visitors saw each part in sequence; and looking down from the palace they perceived the order and unity. Because of the long sloping terrace and the absence of grand staircases, major architectural forms, fountains, and other visual goals, the autonomy of each level was the primary experience within the garden. From the entrance at the base of the hill the greenery of pergolas and trees would have predominated and framed the palace with its tower looming over the estate, the principal enticement to ascend the garden. A central double staircase leads to the second terrace, but from there a diversion from the visual goal is necessary to reach the upper terrace. Two flights of stairs flanking the fishpond, only one of which remains, led to the compartments at either side of the palace. Only from the highest level could the geometry be discerned along with the proportional relationship of parts and a numerical progression. On either side of the central axis there were four large compartments on the long slope, three small ones above, and on the upper terrace two squares, each divided into two rectangular beds. The splendid view from the piano nobile of the palace (fig. 75) encompasses the entire garden below, the plain of the Arno, and the far distant hills, all Ferdinando’s domain once he shed his cardinal’s hat and became grand duke of Tuscany in 1587. On his estate, nature was ordered in harmonious configurations. The trees in the wood on the slope were planted in geometric forms; the pergolas emphasized the order in nature on a grand scale. The separate spaces of each enclosed area, experienced in succession from the lower entrance, yielded to the view of the order, symmetry, and harmony of the whole.

In the eighteenth century the garden remained remarkably close to its original state. The present garden is instead modern in conception, plant materials, and design, lacking the very things that once made it a characteristic Renaissance garden. The sloping ground is now planted with box-lined beds, filled with flowers in spring and summer from the hothouses built in 1833 for the new tropical plants that began to ornament the garden. Citrus trees in vases are brought out in warm months, along with bougainvillea and azalea, and plane trees line the lower boundary of the garden. Although its planting is completely altered, the principal garden is nevertheless still defined by sweeping curves, longitudinal and transverse axes, the second with three round piazzas, and boschetti of holm oak trees in the corners. The central mound, its fountain, and the circles of holm oak trees in the side piazzas all date from the late eighteenth or the beginning of the nineteenth century. Abundant information on former Medici holdings in eighteenth-century documents chronicles the income and expenses of these grand gardens and repeated concerns with their economic state.46 In contrast, the present garden, dating from the nineteenth century or perhaps even the early twentieth for the lowest terrace, is entirely ornamental, and for the most part open space, dry and hot on a midsummer day.47

In other gardens water was one of the means used to connect garden parts visually and conceptually, not only through fountains but also by means of water channels, which could be given significant architectural form. Necessary to the irrigation of the garden and documented from the time of Boccaccio’s Decameron in the fourteenth century,48 water channels later evolved into the water chains and water stairs of the grand sixteenth-century gardens in central Italy. The end result is known, but the stages of development can only be suggested, since the evidence
in documents and descriptions is fragmentary and scattered. Accounts from the end of the fifteenth century hint that in some gardens water channels functioned in the design and were not simply a practical necessity. The garden of Caterina Cornaro at Asolo, described in the late fifteenth century by Pietro Bembo in his dialogue, *Gli Asolani*, consisted of three sequential parts: the garden of compartments with a cross pergola, a *pratello* or little lawn, and two small woods of laurel trees. At the end of the garden, a natural spring fed a fountain carved out of the living rock at the base of the mountain. Its water flowed into a small marble channel that divided the *pratello* in half, then continued on into the beds, almost hidden in the grass, as Bembo observed, probably in small conduits such as those visible in a detail of Utens’ painting of the Ambrogiana (figs. 25 and 63). From this account it seems that at the termination of the first garden the pergola-covered avenue ceded to the water channel, which continued the central axis to the end of the garden.

Elsewhere water which originated in a mountain spring, aqueduct, or its outlet in a fountain flowed through the garden in channels and came to rest in a pond, so that the passage of water in the garden seemed to imitate its course in nature, through mountains, grottoes, rivers, and lakes. The apparent source of water was often a grotto, which imitated naturally dripping caverns and intimated the presence of a real mountain spring. In the mid-sixteenth century Bartolomeo Tarsio saw a garden near Milan in which water emerged from a fountain in the middle of a grotto, situated on one side of the garden. Some of the water from this fountain ran in a stream around the garden, and some emptied directly into a fishpond, so that the source and flow of water suggested a mountain spring which feeds rivers and lakes. In Anton Francesco Doni’s contemporary proposal for a “Villa Civile” for a king, duke, or powerful lord, the intention to imitate a natural source of water is clear, although he does not explicitly continue the analogy in his account of its further progress in the garden. Doni imagined water issuing first
from a fountain in the center of a labyrinth, which was on a mount at the end of the garden. Passing by conduits down through the mount, it emerged in a rustic grotto below, dripping from the vault as in a natural cave. From there various streams passed through the garden and emptied into two fish tanks.\footnote{51}

Other texts suggest different ways in which water could pass through a garden combining practical, design, and metaphorical considerations. Some inventive examples of water channels appear in Cosimo Bartoli’s mid-sixteenth-century project for the garden of the bishop of Cortona which hugged the city walls of Florence. This garden consisted of a prato, orto of rare simples, orchard or riga, and wood. Water brought from the Mugnone River by aqueduct (as large underground conduits were termed) emerged in two fountains on the lawn. In a description which presents a picture of a garden surrounded by the refreshing sight and sound of bubbling and murmuring water, he explained that the water flowed through vases and channels on low walls enclosing the orto, presumably on sloping ground, then passed into the orchard. In the orchard, water fell from the channels into what Bartoli calls a gora, actually two caudals, each almost 4 feet wide (2 braccia), on either side of a central avenue, which emptied finally into a large oval pond.\footnote{52} One of Soderini’s recommendations in his treatise on agriculture late in the century resembles Bartoli’s earlier proposal for a hillside with an abundance of water he suggested creating a large canal which would similarly overflow into channels with an avenue between them.\footnote{53}

Water channels flanking passageways, particularly on a sloping terrain, encourage physical movement, unify parts, and display invention and playfulness in the manipulation of water. In the Este garden at Tivoli in the 1560s water flowed down either side of stairs and ramps, enticing the ascending visitor to seek out the water’s source. The Stairs of the Bubbling Fountains (Scale a bollo) (fig. 76), which along their length include both stairs and ramps, are bordered by long, stepped channels with a pedestal at the end of each step. A small jet of water rises...
from the pedestal, then falls to the next level from spouts in the mouths of grotesque heads. In a wet season when the water supply is abundant, water bubbles up and drips down, making constant gurgling and trickling sounds and even appearing to boil. The development from water conduits to prominent architectural steps and canals in Italian gardens may have been inspired by the marvelous fountain displays seen in Islamic Spain in the sixteenth century, and recounted at length in a letter published as early as 1556 by the Venetian envoy to the court of Charles V in Spain. The water staircase described by the envoy, Andrea Navagero, had channels along the sides as well as in the center and on landings every few steps. There were valves to direct the flow of water down either central or side channels, or both. The precarious progress his account suggests was potentially even more risky, since (much to the delight of Italian visitors) the water could also be made to overflow, inundating the steps and drenching everyone on them.

Italian versions seem tame by comparison, but in different ways they too artfully replicate wild nature in the garden. In two later sixteenth-century gardens, the Villa Lante at Bagnaia, dating from 1568, and the upper garden of the Villa Farnese at Caprarola (fig. 77), begun almost twenty years later, a channel of water was aligned with the central axis down the slope. Wriggling dolphins form the scalloped sides of the stone channel at Caprarola, which has a giant shell at its base, and sprightly grotesque heads initiate and end the water course. As in the Spanish version, there are hidden water jets along the ramp on either side. Water rushes down the center of the stepped bed and swirls around the shells that line the channel, as it would in nature’s own stream. From the side (fig. 78), the structure appears as an undulating, living mass, water and channel fused into one. Such a water chain is an extension of the central fountain, linking the water’s source with the receptacle for it below. At the same time, the form of the water chain seems an architectural analogue for the meandering of rivers: nature’s own form ordered and replicated by art. In the park at Pratolino, a sequence of ponds in curvilinear, irregular shapes meandered down the hillside with water flowing from one to the next (fig. 79). On a drawing a few years after their creation.
Giovanni Guerra explained that for the most part these ponds conform to the situations made by nature. Caprarola's symmetrical dolphins, although more artful, nevertheless also intimate the sinuosity of rivers and streams; they link separate spaces in the garden by following the model of nature's own course of water.

Ancient architectural complexes offered other models for linking garden parts on a hillside, among them the Sanctuary of Fortuna at Palestrina and the gardens of Lucullus on the Pincian hill in Rome. Yet more accessible to sixteenth-century garden designers was the modern example they inspired — Bramante’s Belvedere Court (fig. 80) of about 1504-13. This was an enclosed courtyard connecting the Vatican palace with the Belvedere, the papal summer retreat at the summit of the hill. Essentially a courtyard garden, like the later ones at the Villa Giulia in Rome and the Villa Imperiale at Pesaro, the Belvedere Court enclosed three terraces, two of them planted with compartments and all linked along a central axis by architectural elements derived from antique models. Later, other architects, among them Raphael, Pirro Ligorio, and Vignola, applied to full-scale gardens terraced on a hillside some of the Belvedere Court's design principles, monumental double staircases, and other architectural forms. They also emulated Bramante’s aim of recreating — reinstating as whole, new, and alive again — the imperial villas of the Romans.
Raphael’s garden design for the Villa Madama of about 1518 (fig. 81) was probably the first of the few terraced architectural gardens all’antica that truly combine architectural linking features on a hillside with the conventions of Renaissance gardens. The entire villa was intended to recreate those of the ancients, in scale, architectural forms, decoration, and design. Raphael’s own description of the palace echoes those of ancient writers, borrowing their architectural vocabulary just as he revived the forms themselves.59 Less than half the planned structure was ever completed, but the early nineteenth-century reconstruction by Percier and Fontaine (fig. 82) indicates the basic plan of the building complex with a great circular courtyard in the center. The spirit of the original is also rendered by their presentation of the floor plan enshrined within a classical frame. The engraving serves as well to illustrate the siting of the villa, laid out along a transverse axis parallel to the side of Monte Mario, north of Rome. Raphael’s terraced garden was to be situated on the south-east side, or the left of the palace, perpendicular to the principal axis of the building. Extending along the hillside from the Tiber River below, the garden would have had an exit on to the avenue at the far left of the engraving, approximately where the frame intersects it.59 Other garden projects were designed for the opposite side of the palace complex, most of which, like Raphael’s, were never executed. Among them was Francesco da Sangallo’s design (fig. 11), in which he indicated the planting on each of the terraces.

The aim of reviving classical antiquity through architectural forms and a harmonious design informed Raphael’s garden as it did the architecture. Each of the three terraces is a geometric figure — a square, circle, and square with a semicircle on either side. This last is the same configuration that Bernardo Vecchietti later employed at Il Riposo, where semicircular orchards framed a large square bosco.60 At the Villa Madama the terraces are also proportional: the 220-foot dimension (68 m., 30 canne) of the upper square is repeated in the diameter of the circle below, and the lowest terrace is double their width. Raphael drew compartments on the upper terrace, but did not specify any plant materials in the garden. In later comparable designs — Francesco da Sangallo’s plan for the same villa and the garden of the Villa Petraia (fig. 74) — each of the terraces was devoted to one of the conventional plantings. Enormous staircases provide access from one level to the next, but following the conventions for a ground plan, their form is not indicated, only the number of steps in each. As a result, the geometry and separateness of each unit is emphasized in Raphael’s plan, rather than the architectural connections or massive supporting structures. Barely hinted at are the classical decorative elements and frontispieces that the staircases would certainly have had, in harmony with the overt references to the villas of the ancients in the palace and its decoration.

On the hillside instead of on paper, however, the central visual axis with its dramatic architectural goals would have urged movement upward, while at the same time the geometric shape of each terrace and the placement of fountains and staircases would have encouraged, and even required, the experience of each level as an autonomous unit. Although the frontispieces of the staircases emphasize the center of each terrace, all movement within the garden begins from the sides. The garden is entered by a central staircase at the foot of the hill, but the stairs to the second terrace are located at either side of the transverse axis, which is marked by two fountains. On the next level a fountain stands in the center, and again the stairs are entered from the sides. The upper square terrace also has a central fountain, and finally a central flight of stairs as well. Thus, unlike the Belvedere Court, physical access and visual axis are not identical. The axial organization and
visual unity inspired by Bramante's design and its ancient precedents are balanced by the separateness of each terrace, which must be traversed before ascending to the next.

The gardens planned for the opposite side of the palace, the north-east, or the right in Percier and Fontaine's view, also consisted of three terraces, but differently related to each other and to the building. In the nineteenth-century reconstruction, the horizontal lines at the far right indicate the two upper terraces of Antonio da Sangallo the Younger's project of about 1520 (Uffizi 314A). Francesco da Sangallo's design (fig. 11), dating about five years later, corresponds in location, since the upper, colossal hippodrome-shaped terrace in both schemes lies along the transverse axis of the villa. These two alternate plans differ in various particulars, but they are similar in the absence of both an axial organization and access from the lowest through to the highest level. They also feature hidden stairs and an underground passage. In one plan the middle terrace has no stairs; in the other the same middle terrace has instead two sets of staircases. The designs are intriguing and puzzling, evidence of a different set of concerns of visibility and physical progress.

These projects for the gardens of the Villa Madama along with Bramante's Belvedere Court presented several models for a terraced architectural garden *all'antica*, probably the most famous of which is the Villa d'Este at Tivoli. All the surviving examples in central Italy are widely photographed and studied, but there were also others, particularly in Genoa, which were much less documented by contemporaries in views and descriptions, making reconstruction more problematic. In contrast, one of the most widely recorded of all Renaissance gardens is Cardinal Ippolito d'Este's (fig. 83), which will be discussed fully in Chapter 9, but is examined now briefly in order to see how the long-standing conventions of garden planting and design were integrated with the current interest in terraced architectural complexes. By all accounts Tivoli, begun in 1560, was exceptional in the amount of architecture, the tall and expensive retaining walls, the strikingly classical forms of its architectural fountains, the degree of land alteration, and the huge aqueduct required to bring in water. In a terraced garden with a local water source, gravity could be used to create fountains with great, high jets, a possibility that Cardinal d'Este amply exploited at Tivoli, but which was unthinkable at his garden in Rome because of the terrain and absence of an abundant water supply.

In all these respects the garden at Tivoli was extraordinary, but it conformed to the conventions of planting and notions of design of its time. This is clear from a careful reading of contemporary accounts and of Dupérac's engraving of 1573 (fig. 84). We have seen in Chapter 2 that the level first terrace was originally divided into four large squares by a monumental cross pergola and planted in the traditional fashion with simples and a few fruit trees (fig. 18). On either side of the garden of compartments, where there is presently a muddle of trees and low box hedges creating designs that can barely be read (fig. 85), four large labyrinths retreating the squares of simples were planned and two of them executed. Dupérac's engraving emphasizes the repetition of the same large square compartment, or subdivisions of it, throughout the garden, to the point where diagonal paths, made necessary by the steep hill, produce triangles instead. The more gently sloping land midway up the garden, in the view planted with widely spaced trees, contained as well in 1576 three compartments of various and exquisite grapes, covered by princes and other gentlemen of the court. The dense wood on the steep hill was undoubtedly filled with the chestnut, fir, elm, and laurel trees for which plantings are recorded. All the traditional plantings — simples, fruit trees, and
trees of the wood — had their place within this garden; they were planted in squares and rows, rectangles and triangles, across its length and breadth.

Dupéraz’s engraving of the Villa d’Este reads first of all as a grid pattern. Likewise a contemporary account of the garden which explains the view, probably based on an original description by its designer, Pirro Ligorio, describes the layout as thirteen cross avenues and nine vertical ones. The central axis from the entrance to the palace (fig. 83) is emphasized by a sequence of architectural niches and frontispieces up the hillside, but only one major fountain. In sixteenth-century accounts the cross axes were understood to be as important as the central avenue in the design and experience of the garden, and a number of large and spectacular fountains are situated at their ends. One of the transverse avenues stands out as “the most rich, beautiful, and pleasant,” as it was characterized in the description which corresponds with Dupéraz’s engraving, and at either end are two of the principal fountains of the garden. Vistas to a distant ornament are everywhere in the garden, but especially along this major cross avenue, the Alley of the Hundred Fountains, where a statue of Roma, the personification of the city,
Vistas link parts of this garden visually and encourage progress through it, but hidden spaces and sudden revelations are equally significant factors in the design. An impressive view up the central axis of the garden was revealed only upon emerging from the enclosed and shady space of the grand pergola, not, as it is in Tivoli, from the lower portal. However, murmuring sounds of water, hints of the oracles to come, greet the visitor from the moment of entry. From the entrance to the top of the garden as well, the sound of water can be heard long before any principal fountains are seen. Distant goals, such as Roma and the Tiburtine Hill, encourage movement along the transverse axes, but all the major fountains other side of the garden are contained within separate enclosures. High walls of all but the center of the garden’s principal fountain at the end of the Alley of Hundred Fountains (fig. 86). The anticipation experienced on the cross avenue urges to surprise on entering the spacious and private space of the Oval Fountain (fig. 87), cooled by the shade of plane trees and by an abundance of ...
rushing water. The roar of water is magnified by the containing walls, which in turn enhance the isolation of the unexpected retreat. Contemporaries were well aware of these as enclosures, and noted in particular the more architectural ones such as that containing the Fountain of the Owl at the end of another cross axis (fig. 88).  

Movement through the garden tests both mental and physical agility, as more than one contemporary hinted, in a progress that requires diversion from visual goals, long walks from one end to another, steep climbs, and a good sense of direction, memory, and intuition. Architectural elements invite progress up the longitudinal axes and water steps encourage the finding of the water's source. As in many other gardens, one transverse and one longitudinal axis predominate, and the ultimate goal at the summit can be reached only by diverting from the central avenue and ascending the diagonal paths, which are also a practical necessity. At the top of the garden a loggia outside the palace provides a resting spot to look
down on the garden and observe the order of the whole. That order is now no longer apparent since compartments, labyrinths, and pergolas have been replaced with randomly growing trees throughout.

The parts remain distinct at Tivoli at the same time that they are unified by vistas, axes, repetition of parts, symmetry, water stairs, and monumental staircases. It is typical of sixteenth-century gardens in the tension between units and unity, parts and links. The sculpted imagery reinforces these characteristics of design, since the fountains at the far ends of the transverse axes represent pairs of related themes, such as country and city, nature and art, which are contained in separate enclosed spaces and at the same time provide vistas to encourage movement. This close relationship between design and content is one of the distinguishing features of the grand terraced gardens in central Italy, along with the abundant water, sculpture, and architecture.

At Tivoli, Pirro Ligorio thoroughly integrated architectural features (double and curving flights of stairs, architectural fountains, and water stairs) with the traditional geometric garden, but in other sixteenth-century villas architectural design on a hillside remained a separate enterprise from gardens. Vignola's designs for the Villa Farnese at Caprarola included both architectural linking on the steep slope in front of the palace — curving stairs, ramps, and double staircases — and level terraces in the west and north gardens behind the building, which rest on a considerable supporting structure. Both are emphasized in the fresco that we have seen (fig. 24), since each required significant building and expense. The degree of alteration of the site necessary to create the level terraces can be deduced from the massiveness of the wall supporting the bosco at the end of the west garden (fig. 52). In 1576 Ferdinando de' Medici planned an approach to his villa in Rome which would have yielded a similar combination of architectural slope in front of the palace and garden on a level terrace behind. This is illustrated in a second fresco by Jacopo Zucchi of the villa (fig. 89), the pair of that of the garden (fig. 21), where a monumental platform bearing a huge fountain is approached by massive steps around three sides. A great double staircase with a classical frontispiece leads to the palace. Another staircase adjacent to the garden's supporting wall ascends to a portal which enters on to the short axis of the garden terrace. The project, however, was never executed, and now only a ramp from the palace façade arrives at the garden gate.

er Garden, Villa Farnese, Caprarola.

Architectural approach and level garden terrace come together in a single garden complex in the retreat deep in the woods that Cardinal Alessandro Farnese added late in his life to his estate at Caprarola. Initially intended only as an outdoor dining area, the expanded project for the Barchetto (as Cardinal Farnese called it) was begun in 1584, probably by Giacomo del Duca, and completed in a second campaign by Girolamo Rainaldi from 1620. From the lower gardens a path leads past groves of chestnut trees, around a bend to a wide grassy avenue lined with fir trees, until, ahead in the distance, like an apparition, appears a splendid architectural garden and casino (fig. 90). The complex repeats in miniature some of the principal motifs of the villa below (fig. 24) – an architectural approach on the slope with similar curving flights of stairs crowned by a casino and gardens on level terraces behind. Some of the existing architecture dates from the second phase of construction in the early seventeenth century and
tributes to a sense of concerns very different from those in other sixteenth-
ity gardens, but even the original plan anticipates a new entity. A garden in a
park, the Barchetto at Caprarola is the true beginning of the pleasure

tresco in the loggia of the casino (fig. 91), dating about 1586, offers an
vision of the original project. The architectural components, only sugges-
ted, are framed by a natural setting, with animals roaming and trees in
the right. Indeed, this architectural garden occupies a spot far in the
for which Alessandro Farnese purchased 400 fir trees in 1584. In the
slopes on either side of the architectural approach have stepped ramps as
plots of grass, which suggests that progress to the casino took place
as well as within, the inviting walled passageway. Three terraces can be
ished in the fresco — the even slope with its architectural elements, a flat
front of the casino, and another behind it at a higher level.

Architectural approach on the slope channels movement to the visual goal
casino, although typically the physical access, which is not immediately
requires diverting from the central axis. The approach begins with a
defined on either side by tapering walls which terminate in massive
bearing truncated sculpted figures. At the rear are two prominent
temples. The walls and circular fountain in the center of the piazza
to the sixteenth-century scheme, but the monumental forms that mark the
back of the space are subsequent additions — the pavilions were built by
the 1620s, and the torsos (known as Prudence and Silence) were added
later. Walls enclose the passageway up the slope, ascended by
stepped ramps on either side of the central water chain (fig. 92). The later additions to this complex reinforce the architectonic character and the channeling of movement since they project into the entrance piazza, but the enclosing walls themselves produce the same effects. Originally the design would have been more spacious and less controlling, but not fundamentally different. In the sixteenth-century project, the walls, not the forms within them, are the most innovative aspect of the design.

Unless a willing fountière turns up the fountains and activates the water tricks in the pavilions, and formerly on the stepped ramp as well, the garden seems dry and quiet, without all the bubbles and jets that Guerra recorded in 1604 (fig. 93) and Giovanni Antonio Liberati described ten years later in his poem La Caprarola. Guerra made only a single drawing of this garden, on which he included all the existing fountains, since their number was limited and they were
his primary interest. We must imagine the sequence of fountains as the artist presented them, with the cascade of water over the giant urn seemingly activated by the river gods and flowing down the hill to the lake below, as Liberati called the circular pond. The fountain imagery suggests in a general way the passage of water in nature, and the downward flow of water encourages climbing up to find its source.

At the summit of the slope, the stepped ramp opens on to an enclosed piazza, whose form is determined by curving flights of stairs (fig. 94), in a composition as novel in design as in architectural framework. The shape of this piazza can be termed a pseudo-oval because, like Raphael's first terrace at the Villa Madama (fig. 81), it is formed of geometric figures (semicircles attached to a rectangle). In contrast to other sixteenth-century gardens, however, the articulation of the enclosing walls as well as the plan of the entire garden are not based on these
geometric units, or any other proportional relationships. The pseudo-oval piazza with curving stairs recalls the staircase of a similar form below the palace at the street entrance to the villa and also another oval staircase at Tivoli. The form itself is not new, only the surrounding walls, which diminish as the stairs rise, defining the space and separating architecture from garden. Their rusticated pilasters, rough stone surfaces, and grotesque heads are the decorative mode considered appropriate for a rustic setting in the sixteenth century if nevertheless somewhat elegant here. The heads ornamenting the walls bring a recollection of the antique to the enclosure, since they copy ancient ones in the Statue Court of the Vatican. The influence of the earlier Villa Lante has been noted, and it has also been suggested that the same architect designed both. However, we shall see that the garden at Bagnaia was conceived as a relationship of proportional geometric units and that it conveys a different understanding of the interaction between art and nature in its design, architecture, and imagery.

After the progressive channeling and directing of movement by the architecture on the slope, the curving stairs open on to the level terrace on which the casino is built (fig. 95), an area significantly altered from its original, simpler
Austere in contrast to the decorative surfaces below, the casino was probably executed in a first phase of work by another architect. In harmony with its plain surfaces, the terrace also received little décoration. The parapet around the perimeter is ornamented only with large spheres in the fresco; the existing sculpture as well as the fountains were all added in the 1620s. At the rear of the terrace flights of stairs rise along the supporting wall. On the balustrades, chains of dolphins spit water into vases, an elaboration of the water stairs at Tivoli. Unicorns, which are Farnese devices, now guard the approach to the terrace, where the symmetrical low fountains are ornamented with sea horses. Male and female herms stand around the perimeter of the terrace, gesturing emphatically and bearing vases on their heads, perhaps sculpted by Pietro Bernini, who worked under Rainaldi. The herms create almost a screen separating the regular terrace from the trees outside, a division which is emphasized by the present low, geometric patterns of box.

In the inventory after the death of Cardinal Odoardo Farnese in 1626, this terrace is called "il giardino dilla verdura," the garden of greenery, and it contained 55 large plants of fruit trees, perhaps sweet orange, in terracotta vases.
Many other plants are listed in the inventory as well, although whether they occupied the lower or upper terrace is uncertain. Among them were topiary—six vases each with two peacocks of myrtle, another five each with Farnese lilies of myrtle, four vases of cherry laurel, two of bitter orange, and one exotic fig tree. The 82 smaller vases with various kinds of flowers were probably intended for the flower garden above. With fruit trees and perhaps also topiary and flowers on this terrace, but little sculpted ornament, the line between nature beyond and art within would have been less sharply drawn.

The casino is built into the hillside, its single-story front resting on the terrace “of greenery,” while behind it a tall retaining wall supports another terrace, this one designated in 1626 as a garden of flowers (fig. 96). In the fresco this terrace is depicted as an enclosed space containing designs of greenery and surrounded by a pergola. The octagonal fountain, which Guerra inserted in a box on the left of his
Caprarola, from G. C. von
Premer, Illustri fatti
farnesiani coloriti nel real
Palazzo di Caprarola, Rome,
1748, Dumbarton Oaks,
Trustees for Harvard
University.
drawing, remains in its original location in the center of this space, and in the sixteenth century two smaller fountains stood on either side. In the 1620s, when the garden was expanded to the present dimensions, the enclosed garden behind the casino was transformed into a prato leading to a flower garden beyond, as Giuseppe Vasi’s plan of 1746 illustrates (fig. 97). The original grass surface was some time later ornamented with pebble mosaics.

Just as the two terraces were identified in the early seventeenth century as gardens “of greenery” and “of flowers,” not simples but ornamental plants, so too the entire garden was almost exclusively for pleasure. The gentle slope of the seventeenth-century garden of flowers is now missing the flower beds that Vasi indicated on his plan, but even with them the design and mood of this terrace would differ significantly from those of earlier gardens. On either side of the broad central avenue, the slope is terraced into three levels, supported by very low walls ornamented with sculpted fountains. This garden differs from sixteenth-century examples in the absence of cross avenues and thus of the typical grid pattern with which nature was ordered in Renaissance gardens, and in the unprecedented graduated slope and low walls. At the summit of the garden four colossal pilasters stand in a semicircle, containing but not enclosing the garden, and suggesting an indefinite continuation rather than the limited space of Renaissance gardens. The overall effect of this entire complex, far from the town and grand palace below, surrounded by the silence and stillness of the wood, highly ornate despite the pretext of rustic ornament, is extremely appealing, perhaps because in its creation the aesthetic aim so much overpowered the utilitarian and philosophical claims that equally informed earlier gardens.

The upper garden at Caprarola is an appropriate end point for the survey of Renaissance garden design because it illustrates at the same time familiar garden elements and the beginnings of a different design concept. In comparison, the Este garden at Tivoli, for all its radically new integration of architecture and conventional planting, is well grounded in the traditions of the sixteenth century. The garden at Caprarola consists of three principal parts, the slope and two level terraces, and as in earlier gardens each is experienced in succession because of the difference in level. Geometric figures form the basis of the pseudo-oval piazza, a shape used in other gardens, but, in the absence of the original compartments on the level terraces, there is little evidence of the geometry and proportional relationships which are the fundamental design principles of other gardens. The seventeenth-century addition on the upper slope appears neither measurable nor finite since there is no grid pattern and no definite closure at the upper limit of the property. The architectural elements at Caprarola recall those in other gardens, particularly the water chain on the first slope. In no other sixteenth-century garden, however, is the central axis enclosed by walls, which anticipate the high, wall-like hedges of later seventeenth-century gardens and their effect of controlling movement and visibility. In other sixteenth-century terraced architectural gardens visual goals encourage progress up the dominant central axis, but at the same time other axes and cateniments invite movement in various directions. In those other gardens, the architecture is also contained within a geometric scheme which includes plant materials and is not independent from them. In the prominence of the architecture, central axis, and control of movement, the upper garden at Caprarola anticipates later gardens. The features of this garden that differentiate it from others of the late sixteenth century may be influenced not only by a new taste but also by the fact that this garden is situated in a barcetto, a little park, where, as we shall see, different notions of organizing and ordering nature held sway in the sixteenth century.