
Two Roman Pillars from Hadrian's Villa at Tivoli

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During the reign of the emperor Augustus (*Imperium* dates 27 B.C.–A.D. 14), Rome experienced a boom in luxury public and private edifices, transforming a city of brick into a metropolis of marble. This explosion of building activity was a blatant advertisement for the empire's new power and wealth. In their quest for self-glorification, the Romans discovered that the lavish use of colored marbles, as well as rich and inventive carvings on architectural features, greatly enhanced the grandeur they craved. There was no technical need for such enrichment; in fact, decoration of building parts increased the complexity of a construction—in planning, cost of labor, and time. However, adorning structures with carved ornament proved well worth the effort, since an array of rich visual effects dazzled visitors and highlighted the empire's greatness.

Embellished architectural elements could be found on numerous public monuments in Augustan times—the most notable being the Ara Pacis (Figure 1). This monument, with its elaborately sculpted scrollwork and fauna, delighted the Romans' taste for luxury and sparked a new fashion for carved vegetal ornamentation. On public and private monuments of all types, flora and fauna decorated architecture throughout Roman times and into the medieval period.

The Metropolitan Museum of Art possesses a pair of pillars, enriched with ivy and wildlife, that reflect the Roman passion for adornment. These marbles, purchased in 1919 by the Museum's Department of Greek and Roman Art, were exhibited in the Classical Wing and published among the new accessions in the Museum's *Bulletin* in 1921 and 1922 and its catalogue of classical art in 1930.¹ During the 1940s and 1950s, when many of the display rooms for classical art were dismantled, the pillars were put into storage and all but forgotten. More than half a century later, in 2007, they were installed at the southeast entrance of the outer courtyard in the Leon Levy and Shelby White Gallery.

Their recent public exhibition, together with detailed photography, enables this first, incisive assessment of the marbles.

In this article the marbles are identified as Pillars A and B (Figures 2, 3). The pillars possess slightly different dimensions: Pillar A measures 108 x 12½ x 13¼ inches (274.3 x 31.8 x 33.7 cm); Pillar B, 108 x 12¾ x 13½ inches (274.3 x 32.4 x 34.3 cm). Based on calculations made from the remnants of the vessel with a bird at the bottom of the front face of Pillar B (see Figure 7), both pillars were originally about 13¾ inches (34 cm) wide. According to Vitruvian rules, the ideal proportional relationship of the width to the height of a column should be between 1:8 and 1:10.² Therefore, the Metropolitan's pillars must originally have been about 12 feet (3.66 m) in height.



1. Ara Pacis, detail of the exterior wall. Roman, 13–9 B.C.
Forschungsarchiv für Antike Plastik, Köln (Fitt80-34-02)



2. Pillar A, front panel.
Roman, ca. A.D. 130.
Marble, 108 x 12½ x
13¼ in. (274.3 x 31.8 x
33.7 cm). The Metropolitan
Museum of Art, Rogers
Fund, 1919 (19.192.34a)



3. Pillar B, front panel.
Roman, ca. A.D. 130.
Marble, 108 x 12¾ x
13½ in. (274.3 x 32.4 x
34.3 cm). The Metropolitan
Museum of Art, Rogers
Fund, 1919 (19.192.34b)



4. Inner panel of Pillar A (Figure 2), showing pivots



5. Outer panel of Pillar A (Figure 2)

Substantial interference has damaged the marbles significantly. On the front panel of Pillar B, at the base of the vessel, is a small vertical channel; on the underside a dowel hole shows that, at one time, the pillar was supported by a pin. On the reverses of both marbles, the outer areas have been recessed 2½ inches (6.5 cm) along the entire length. Pillar A shows further interference: toward the bottom a channel 3½ inches (9 cm) wide was roughly carved across the back, and about halfway up at the right a small metal bar was inserted. The inner sides of both pillars (see Figure 4) have been trimmed slightly, and vertical metal pivot pins with pivot caps were fitted into indentations at the top and bottom (the top pivot of Pillar B is now missing). Approxi-

mately halfway up Pillar B is a rectangular hole with plaster infill. Today, the outer side of Pillar A (Figure 5) contains only about half of its original decoration, while behind this section the marble was hacked off, leaving jagged edges and rough surfaces. At the front edge of this outer side are two rectangular recesses, the top one 3⅜ inches (8.5 cm) wide, the bottom, 3⅛ inches (8 cm). Both have been smoothly picked. These depressions were obviously made to receive insertions, but as there is no evidence of the use of ferrous metal, the additions may have been of wood.

The outer panel of Pillar B also shows two distinct phases of interference. The front portion of the relief has been carved with a point, whereas the back section has been treated with



6. Detail of the calyx-crater at the base of Pillar A (Figure 2)



7. Detail of the calyx-crater, with a bird to its left, at the base of Pillar B (Figure 3)

a claw chisel. Moreover, at the bottom a hammer was crudely used to remove some marble. Although differently treated, the outer reliefs of both pillars show that the relief ground at the back has been reduced equally on each edge by $5\frac{1}{8}$ inches (13 cm). Overall, most of the edges on both pillars have been badly chipped, and weathering has erased much of their finely carved surface details, especially at the back.

Before continuing with an assessment of these marbles, it is necessary to define them in architectural terms, since there is some ambiguity in the distinction between pillars and pilasters.³ Pillars are typically characterized as free-standing rectangular or square supports, while pilasters are always applied or engaged and, by losing their independence, become an integral part of a wall. According to classical principles, a key difference between a pillar and a pilaster is the ratio of the support's thickness to its width.⁴ A pillar should have a depth equal to or greater than half the width of its front face; by contrast, a pilaster projects only fractionally from a wall. I therefore prefer to classify the Metropolitan marbles, with their deep projections, as pillars.

The surviving section of decoration on the outer side of Pillar A (Figure 5) demonstrates that both supports were embellished on three sides. The coarse treatment and hacking away of the inner sides of both pillars (see Figure 4) are completely at odds with the flawless workmanship of the carved faces. Because of this brutal usage, which must have occurred after the marbles' initial installation, the original finish of these panels cannot be determined with complete certainty. However, three-sided pillars are uncommon in

Roman architecture, so the twin supports were most probably worked in the round.⁵

Both pillars' front panels bear vertical friezelike reliefs with similar ornament, but variations in detail. At the bottom of each is a calyx-crater (Figures 6, 7) whose elaborate enrichment calls to mind toreutic work.⁶ Each vessel's body is fluted with a continuous tongue pattern that divides the bowl into many tapering segments. On either side a volute handle rises from the shoulder. Its tall, flaring neck repeats the tongue design—in imitation of motifs on metal calyxes—but with the scalloped edges facing downward. A plain band encircles these ribs. Above, an ovoid motif embellishes the broad, flanged lip, while below, a knopped stem links the crater body with its pedestal. The bottom parts of the reliefs on both pillars have been lost and the feet of the vessels are therefore missing, but comparative material indicates that they originally rested on a baseline representing the earth.⁷

Drinking vessels are often featured within the decorative syntax of architectural supports.⁸ Elaborately worked metal containers and their counterparts in stone abound throughout Roman art.⁹ These elements often relate to the gardens of Roman houses, where an idyllic ambience was created and enhanced with containers in all shapes and sizes. They served as fountains, birdbaths, or mere ornaments, as Pompeian wall paintings repeatedly show.¹⁰ Carved vegetation springing from a vessel also refers to actual gardening methods.¹¹ Reuse of discarded amphorae and various other containers as planting pots had long been practiced in the ancient world. Pliny (*Natural History* 12.16) describes how



8. Detail of a lizard on Pillar A (Figure 2)



9. Detail of a bird with a grasshopper on Pillar A (Figure 2)

earthenware pots were provided with drainage holes for roots. As the plants grew and became pot-bound, the roots extended through the holes and eventually broke the containers.

Symmetry is a primary tenet of Roman art. Thus the craters on the pillars, although now off-center, were originally centered on their respective blocks. At the left of the vessel on Pillar B a branch extends from the handle, and curled tendrils springing from it repeat the spiral of the handle (see Figure 7). Atop this offshoot perches a bird, its head turned backward to snatch an insect whose broad wings and narrow body identify it as a butterfly.¹² At the left on Pillar A a similar tendril issues from the vessel's handle (see Figure 6). This section is so badly damaged that little of the decoration is preserved. What remains suggests a horizontally placed creature, smaller than the bird, with a big head, cylindrical body, and wings slightly open as if in readiness to alight or fly. It is probably a grasshopper.¹³ Equilibrium of design would require additions on the lost sides of both vessels, but while the Romans preferred equal and opposite motifs, compositions with asymmetrical components do occur.¹⁴ Possibly the bird and insect carvings were swapped around on the pillars.

A thick, slightly bent stalk shoots up from each crater's mouth, and this vertical ornament asserts the rectilinear character of the supports. As it ascends, the stem tapers gracefully. Rich sprays of foliage cover the shaft and delicate tendrils spring from it. The trilobe leaves identify the plant as young ivy; in older plants the lobes are less pronounced or disappear. *Hedera helix* is a common evergreen woody

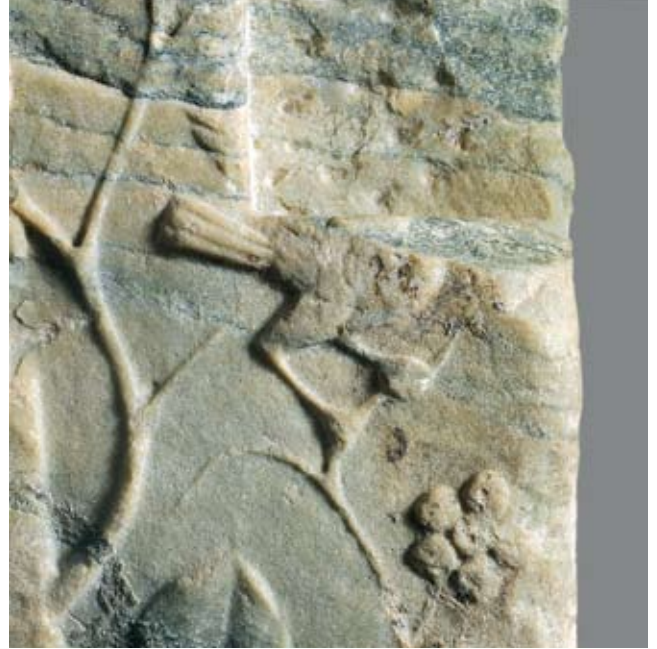
creeper with long, tough stems, clinging rootlets, and fat, blue-black berries that are popular with many birds but poisonous to humans.¹⁵ Interspersed among the carved leaves are corymbs of three to seven large, globular berries set close together to form compact clusters.

Birds, reptiles, and insects discreetly inhabit the tangle of ivy. The avifauna on the two pillars are extremely difficult to identify, because surface erosion has erased much of the detail and because there is no color—so useful in determining species in wall paintings and mosaics.¹⁶ All appear to be songbirds. On Pillar B the bird with a slim body and long tail next to the vessel (Figure 7) could be a song thrush.¹⁷ Above the crater on pillar A a three-toed, slender lizard with a long tail scurries up the foliage, stretching toward a cluster of berries and grasping at a twig with its right foot to gain a grip (Figure 8).¹⁸ Perching farther up, a small, chunky bird, possibly a wren,¹⁹ has seized a grasshopper with tightly folded wings for its dinner (Figure 9).²⁰ The prey is nearly as large as the predator, adding a humorous touch. Higher still, another bird is poised to gobble up a feast of berries that dangle before it (Figure 10); the large, sharp bill, strong body, and long tail suggest a member of the thrush family, possibly a blackbird.²¹

The remains of the left side of Pillar A contain decorative motifs matching those on the front panel: an ivy stalk, foliage, corymbs, and part of a bird, perched obliquely on a branch (Figure 11). At the top outer edge one can also recognize another bird with outstretched wings that pecks at a berry cluster. Because a large section at the bottom of the relief has been lost, it is impossible to know whether the ivy



10. Detail of a bird with berries on Pillar A (Figure 2)



11. Left side of Pillar A (Figure 2), with a bird

stalk sprang from a container, as it does on the other panels, or whether it sprouted from the earth, a motif for which there are numerous examples.²²

On Pillar B a rat snake entwines the central stem; slithering upward, its body coils again around a side shoot (Figure 12).²³ The reptile's goal is immediately apparent: above to the left two fledglings grip the edge of their nest of twigs, which is supported by the ivy vine. With beaks agape and widespread wings, the baby birds screech in terror. Below, their mother flutters her wings, ready to defend her offspring from the predator. They may be a family of robins.²⁴ Proceeding upward, three birds are settled on branches, two on the left, one on the right (Figures 13–15). As they are similar but without any distinguishing marks, these must be generic depictions.²⁵

Although both marbles are heavily eroded, photographs taken before their present installation, together with close examination, reveal that the reverses also originally bore ornamentation similar to that of the front reliefs. There are faint remains of calyx-craters, flanked by creatures, from which sprouted ivy stalks with berry corymbs, their foliage teeming with wildlife. Although most of the individual features and fine detail have been lost, near the top of Pillar B one can still detect the outline of a bird perched on a twig. On Pillar A a snake coils around the central stalk, winding its way upward toward the indistinct shapes of small birds in a nest. From this evidence, we can conclude that the back panels contained iconography similar to that of the front panels, but with notable differences. The designs on the reverse were simplified by the sculptor: there was less



12. Detail of a snake and a birds' nest on Pillar B (Figure 3)

foliage than on the front faces and fewer convolutions of the snake than on the front of Pillar B. Furthermore, when the reptile-with-baby-birds motif was used on Pillar A, it was transposed to the reverse, rather than the face.

The high-quality carved ornamentation of the Metropolitan's ivied pillars would have required as much—if not more—technical proficiency as sculpting portraiture and statuary. Since Roman artisans possessed no blueprints for vegetal ornament on architectural features, a sculptor needed both imagination and resourcefulness to create an appealing and varied design. To capture the subtleties of nature, as well as to compose elements aesthetically, as these pillars do, demonstrates great skill and innovation. Even though he employed identical pots and flora, the creator of the pillars was able to achieve a subtle asymmetry. His overall planning is evident, and he added variety by transposing some motifs of the two main sides of the pillars to the reverses. The artist's knowledge of plants shows in the ivy tendrils that shoot naturalistically from the central stalk and curve upward in numerous directions, with ample spacing between the elements, and the lack of overlap adds to the feeling of both spaciousness and vitality.

Unsurprisingly, the most interesting creatures were sculpted at the lower levels of the pillars, where they could be appreciated easily. But like the best craftsmen, this carver did not skimp: higher up the foliage is still inhabited. The three schematic birds in the upper relief of Pillar B (Figures 13–15) were probably added only for balance and variety; their quiet poses underline their decorative function. Through the simple device of alternation on either side of the central stalk and changing the orientation of creatures,

the sculptor created the impression of greenery teeming with wildlife. He was certainly a very keen observer of nature. Birds feasting on insects reveal his clear understanding of the interdependence and transitory character of life, as manifest in the scenario of a snake menacing baby birds (Figure 12). However, any deep reading of the life-and-death scene in this context is unwarranted. Depictions of the conceit were perennially popular in ancient literature and visual arts, and the vignette is simply a vivid depiction of nature for its own sake.²⁶ The artist expertly captured the agitated movements of the mother bird. By shortening perspective, he showed that she is a bit off-balance, having just alighted on a branch and still fluttering her wings. Her brave attempt to drive the snake away from her vulnerable, frightened nestlings injects dramatic tension into an otherwise idyllic scene, offering a stark reminder that death is always present in the animal kingdom.

The artist's obvious fondness for the sinuous shapes of reptiles is evident in both their detailed carving and their important central positions. While he must have worked from personal observations of reptiles, there is also a definite element of whimsy in their representation. On Pillar A, for example, the lizard's body and tail stretch out full length into a fluid S-curve, echoing the twists of ivy (Figure 8). And on Pillar B one's eye is immediately drawn to the snake featured at its center (Figure 12). The reptile writhes vertically up the stalk, reflecting its natural ability, yet its ribbon-like posture also creates a fanciful, curlicue configuration trailing down the main stem, almost as if it were part of the vine. Affinities in design and floral and faunal ornamentation, together with an attentive scrutiny of wildlife and a



13–15. Details of three birds on Pillar B (Figure 3)



16. Pilaster with a foliate acanthus rinceau (assembled view). Roman, 1st century A.D. Marble, 11 ft. 6 in. x 2 ft. 4 $\frac{3}{8}$ in. (3.5 x .7 m). The Metropolitan Museum of Art, Rogers Fund, 1910 (10.210.28)



17. Three pillars from the gardens bordering the Canopus, Hadrian's Villa, Tivoli. Marble; ca. 81 $\frac{1}{2}$ x 9 in. (207 x 23 cm), 95 $\frac{5}{8}$ x 10 $\frac{5}{8}$ in. (243 x 27 cm), 134 $\frac{3}{8}$ x 15 in. (342 x 38 cm). Museum Room IV (1063, 2627, 423540). Photograph: Deutsches Archäologisches Institut, Rome (D-DAI-ROM-1882.1371)

distinctive carving style, confirm that these two marbles are unquestionably by the same master.

The way the artist has emphasized the organic coherence of the ivy adds aesthetic power to his composition. Its strong main stalk bends realistically, and its rough-textured bark is tactile. Offshoots at the front sprout convincingly from the stem, and the delicately graduated carving of the leaves enhances their three-dimensional quality. The sculptor's firsthand knowledge of garden plants has produced the

deeply indented, lobed leaves natural in juvenile ivy, instead of the heart-shaped older foliage so common in Roman decorative art.²⁷ Great care was taken to delineate the central veining of the leaves, and the center of each berry has been pricked with a small hole, exactly where a tiny point would emerge on ivy's real fruit. The young plants and baby birds, together with the birds eating ivy berries, which ripen only in March or April, establish the season of this scene as spring.

Both pillars are worked from *cipollino verde* or Marmor Carystium, a stone characterized by a white or pale green ground, heavily striated with broad, wavy bands of either dark or light green.²⁸ The word *cipollino* suggests the resemblance of the marble veins to the interfoliated markings of a sliced onion. Historically, *cipollino* was called Marmor Carystium because it was first produced from quarries around the port town of Carystos in the southern part of the western Aegean island of Euboea (Evia) in Greece. *Cipollino* was desirable primarily because of its polychrome character; it is durable, but because it contains a significant amount of both talc and mica—friable minerals—it is unsuitable for small sculptures. While this stone was little exploited by the ancient Greeks, for the more flamboyant Romans, sculptures and architectural features crafted in exotic imported *cipollino* became status symbols.²⁹ Under the emperor Augustus and his successors, pillars and pilasters worked from Carystian stone often embellished luxurious and prestigious buildings, such as the emperor's own forum.³⁰ Roman builders showed a preference for carving architectural supports of *cipollino* as monoliths, probably to display the extraordinary swirling patterns to their best advantage. As a rule, pillars were fitted with capitals and bases. Romans preferred contrasting colors, so capitals and bases of white marble often offset shafts of *cipollino*. Vertical white additions bracketing the wavy green marbling and the undulating movement of the carved ivy would have accented the contrast.

The florid taste of the Romans did not leave color and natural pattern to speak for themselves but demanded further enrichment with decorative details. Artists of the early imperial period realized that carved flora could enhance pillars that had been either left plain or articulated only with vertical flutings in classical and Hellenistic times. Marion Mathea-Förtsch has studied in great detail the plant motifs sculpted on pillars and pilasters in both Rome and the western provinces of the empire. Whereas the embellishment of building features with foliage is usually thought to have been inspired by Pergamene art of the second century B.C., Mathea-Förtsch argues for its introduction during the late first century B.C.³¹ Regardless of the exact date of the invention, it was certainly in early Augustan times that ornamenting supports with foliage became established on a large scale throughout the empire.

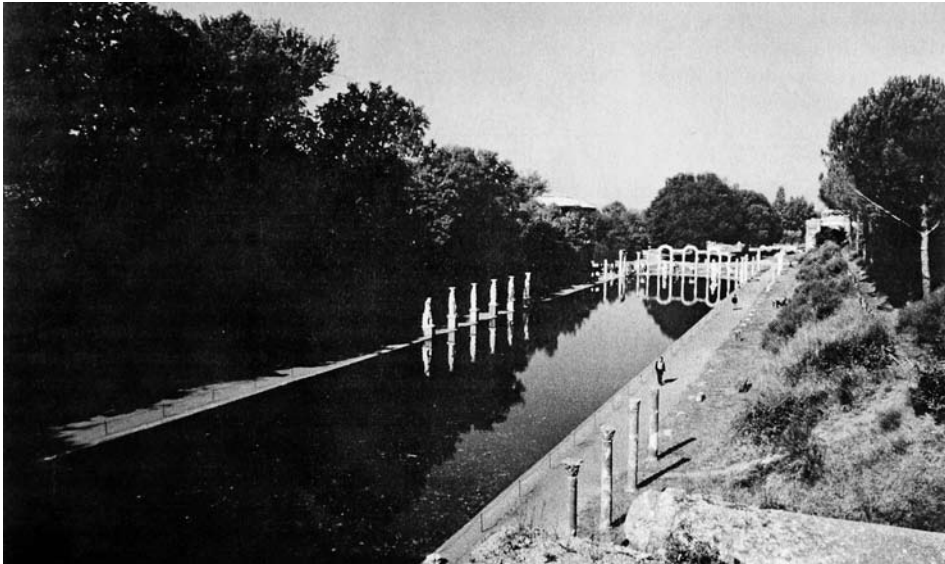
There were no sculptural templates or prescribed combinations of plants for beautifying pillars, but there were some conventions.³² Typically, a single type of vegetation was illustrated, and on only one side of a support. That it contravenes this formula makes the sole use of ivy on all surfaces of both Pillars A and B exceptional.³³ Mathea-Förtsch has divided ancient Roman flora into four basic categories. Within three of these, artifice is the rule; vegetation is depicted not to re-create nature but simply for its ornamental value.

The Metropolitan Museum owns a pilaster that displays such a stylized approach (Figure 16).³⁴ From a clump of acanthus leaves at its base, double-stemmed tendrils rise to form regular opposing scrolls whose tips end alternately with flowers or leaves. The composition is pure artistic invention, since in nature the acanthus plant grows straight up from the ground and does not form whorls.

Clearly, the Metropolitan ivied pillars belong to Mathea-Förtsch's fourth design category, which incorporates plant life in a far more informal and naturalistic manner.³⁵ Precursors, such as realistic trailing grape and ivy vines, exist in both Greek and Etruscan art.³⁶ A few comparisons between the acanthus pilaster (Figure 16) and the twin pillars reveal the extent of the stylistic daring embraced by the fourth sculptural type. Here, the ivy is sculpted to resemble a fresh plant climbing asymmetrically and clinging to stone by its rootlets, just as it would in nature. Its rampant, luxuriant growth is accentuated by the greenish marble that suggests flexible vegetation, visually transforming hard stone supports into lifelike, sensually rich scenes. By contrast, the pilaster's acanthus scrolls crowd the surface, forming rigid medallions at regular intervals. It also has an elaborate border that would have sharply separated the relief from the surrounding wall. The pillars' panels have not been constrained by formalized frames, an artifice that would have fixed the foliage into individual "tableaux." Instead, the ivy appears to "grow" freely, without any boundaries. As a result, the viewer perceives it as real and alive. From the fourth century B.C. on, animal and anthropological inserts increasingly animated carved vegetation, and this trend reached the height of fashion in Augustan Rome.³⁷ On the acanthus pilaster, birds, a lizard, and an Eros are depicted in miniature, so that they remain secondary features of the composition, whereas the fauna on the ivied pillars are realistically represented to scale.

In general, Romans maintained their predilection for systematic splendor, appreciating imitations of natural foliage much less than formalized arrangements. Naturalistic carvings of fruit-bearing plants appeared sporadically on supports until the middle of the first century A.D. and reached the zenith of their popularity under Emperor Hadrian (*Imperium* dates A.D. 117–38).³⁸

To recapitulate, the important elements of the Metropolitan's pillars are their true-to-life depiction of vegetation, high-quality workmanship, absence of drill and grooved work, well-observed realistic fauna, and low-relief carving that fuses flora and fauna with the background to create an aesthetically integrated entity. These characteristics bring the Museum's marbles into close relationship with three pillars found among the ruins of the gardens bordering the Canopus complex at Hadrian's Villa at Tivoli, about twenty miles from Rome (Figure 17).³⁹



18. View of the grounds of the Canopus, Hadrian's Villa, Tivoli, looking north. Photograph: Jashemski and Salza Prina Ricotti 1992, fig. 2 (photograph by F. W. Luciolli)

Although the provenance of the Metropolitan's pillars is unknown, certain facts point to their origin. Furnishing buildings with elaborately carved subsidiary features was expensive and therefore the preserve of public and imperial buildings. Also, pillars and pilasters were rarely worked in costly colored marbles by master artists, which further argues for a very rich client: either the Roman state or an emperor.⁴⁰ Moreover, these architectural features were seldom adorned with naturalistic foliage.⁴¹ Tellingly, every other surviving example of this decorative type—with the exception of the trio of pillars from the Canopus complex—is stylistically unlike our marbles and of unknown provenance. All the evidence, therefore, points to Hadrian's Villa as the most likely source of the Metropolitan's marbles. Finally, the discovery of all the comparable examples in one locale within Hadrian's vast estate—the Canopus—pinpoints the exact site of the building to which the ivied pillars first belonged.

The find-spot of the three similar pillars of the villa also suggests the original use of the Metropolitan marbles.⁴² Hadrian's Canopus was a banqueting complex with an elongated pool (Figure 18). It occupied a valley whose eastern and western slopes have revealed evidence of elaborate, terraced gardens, which archaeologists believe were dotted with various structures such as pergolas, pavilions, temples, and belvederes.⁴³ Work on the Canopus and its surrounding area dates to about A.D. 126–30.⁴⁴ Since the garden buildings must have been among the final touches to the site, the Metropolitan pillars can be assigned to about 130.

Content often reflects context, and Mathea-Förtsch has argued persuasively that the Tivoli pillars decorated garden building(s) in the extensive pleasure grounds.⁴⁵ The singular use of the same plant species as a motif on marbles of the

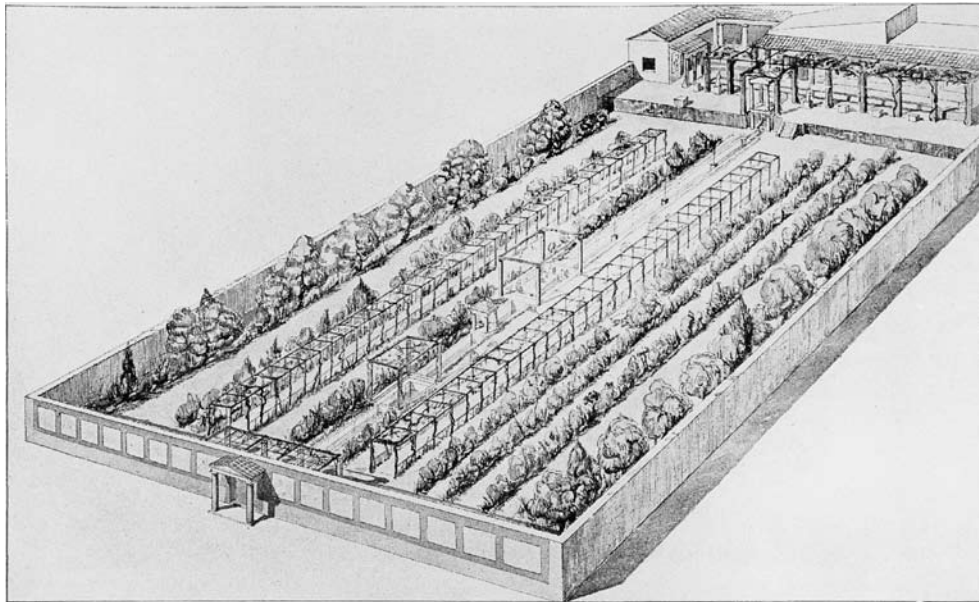
same dimensions, carved from the same stone—and recognizably by the same artist—prove that the Museum's supports were part of a matched set, symmetrically disposed to support an outbuilding in the Canopus area.

Admittedly, neither marble pillars nor pilasters displaying carved foliage have been preserved intact on buildings in the gardens of Hadrian's (or any other Roman) villa, but this dearth of examples may simply be a quirk of survival. Numerous pillars and pilasters with painted decoration and fluting (cheaper alternatives to sculpted ornament) do exist in gardens of private Roman houses, and fragments of supports with sculpted vegetation have also been found among the ruins of other pleasure grounds.⁴⁶ Moreover, small columns and pillars carved with foliage decorated gardens of Pompeian houses, as did painted representations such as the murals of the Cubiculum from Boscoreale—on view in the Metropolitan Museum.⁴⁷

Vine-covered pergolas were prominent features of Roman gardens and were sometimes worked in stone.⁴⁸ Such constructions have been found in the pleasure ground of the House of Octavius Quartio (also called M. Loreius Tiburtinus) in Pompeii.⁴⁹ A watercolor (Figure 19) shows that the enormous garden or *hortus* was transversed by a long canal whose banks were punctuated by small aedicules and pergolas supported by plain columns on four sides (Figure 20). This instance suggests the original function of the Metropolitan pillars: the marbles supported one-half of such a garden building within the extensive grounds of the Canopus.⁵⁰ Such fantasy architecture, of which the Romans were obviously fond, added imaginative elements to the surrounding landscape that were similar in spirit to other buildings at Hadrian's residence. The Tivoli pillars (Figure 17), varying in size, of more modest quality, and of different marble, probably adorned other buildings on the same site.⁵¹

What could have been more appropriate to decorate this bucolic setting than ivy, the sacred plant of the god Dionysus and an emblem of renewal? Indeed, ivy was ubiquitous in Roman gardens, and sculptures of a Dionysiac nature form a leitmotif everywhere in the Roman realm, including the Canopus.⁵² The Tuscan country seat of Pliny the Younger (*Epistles* 5.6.36) contained within the garden a dining area "shaded by a vine trained over four slender pillars of Carystian marble." One can easily imagine the Metropolitan pillars as stone translations of this real-life setting.

For Romans, gardens embodied the love of nature—but nature subdued by the hand of man and brought into his service to provide peace and plenty. Each garden embraced the spirit of its locus, making the setting part of its unique identity. Romans commonly employed painted murals of vegetation on one or more garden walls to create the illusion that a garden was larger than it was in reality. Ornamenting garden pillars with images of the opulent natural world not



19. The garden of the House of Octavius Quartio (also called M. Loreius Tiburtinus), Pompeii. Watercolor. Photograph: Spinazzola 1953, fig. 481

only created a tableau but blurred the boundaries between the real and imagined gardens, rather as contemporary infinity pools and plant-filled conservatories do.

Once removed from their original location, the pillars experienced an afterlife: they were adapted as doorjambes.⁵³ When this happened, they were transposed. The Metropolitan now displays them in their original (correct) positions. Reuse of materials is as old as the arts of construction themselves. Marble was always particularly desirable because of its associations with luxury and status. Thus, over the centuries, the rediscovered site of Hadrian's villa became a looter's paradise rich in sculptures—many of colored stones.⁵⁴

While elegantly carved architectural elements were readily available throughout the Italian peninsula, and amply exploited—a fact to which churches of late antiquity and the early Middle Ages clearly testify—reuse of building components was neither a cheap nor especially easy solution.⁵⁵ Recycling involved extraction, transportation, and trouble for the architects and workmen, who also had to adjust and augment elements to fit their new context. However, the chief challenge of reusing marble lay in safely dismantling it from the original location without damage. The complexity of extracting engaged pillars and pilasters and then reassembling them appropriately may explain their relatively infrequent reuse.⁵⁶ By contrast, the removal of freestanding architectural features such as columns required much less effort, and the results could be impressive. The Metropolitan's ivied twins proved ideal candidates and were therefore translated from pillars to doorposts.

For convenience and speed, stone elements were usually recycled into something already close to their existing dimensions, and the size and shape of the pillars clearly suited them to flank a doorway.⁵⁷ Reused marbles were



20. The garden of the House of Octavius Quartio (also called M. Loreius Tiburtinus), Pompeii. Photograph: Soprintendenza Speciale per i Beni Archeologici di Napoli e Pompei

often placed in positions of visual and architectural importance. These attractive sculptures, with their multicolored marble and strong projections, would have created a very impressive entry to a prominent building. The neutrality and universal appeal of their vegetal motifs no doubt offered the artisans great scope in choosing their new context.

We have reasonable proof of how the ivied doorjambs fitted to the building and doors of their new home. On the reverses the inner edges were cut back to accommodate the door leaves. The surfaces of the inner sides of the pillars were slightly trimmed and indentations carved at the top and bottom into which metal pivots were fitted (see Figure 4). Because both doorjambs have pivots, it is clear that the door consisted of two leaves, most probably of wood, that swiveled on pins set into holes in the hinges. These pins originally pointed upward and were held in place by round metal collars, a type of hinge that postdates classical times.⁵⁸ The position of the pivots—at the back of the jambs—proves that the door leaves opened inward. The outer sides of the pillars (see Figure 5) were also cut back so as to lie flush with their adjacent walls. Since these sides and the reverses were not meant to be admired, the builders hacked away at the marbles indiscriminately. The rough finish indicates that they probably abutted a surround of coarse material, such as rubble or ashlar.

Crude dismemberment of building elements is easy; looting and destruction ignore the integrity of works and their details. And so it was with the ivied pillars. When they were installed in their second location, the workmen proved indifferent to aesthetics. The present position of the pivots demonstrates that the marbles were placed upside down. If the pivot pins also faced downward, hanging the door leaves would have been almost impossible. More important, the weight of the doors would have dragged the hinges out of true and eventually caused the leaves to sag and fall off. Imagine the ivy carvings inverted, with the calyx-craters at the top of the panel and fauna ludicrously dangling upside down. Clearly, the workmen were uncomprehending, and one is also forced to wonder about the taste of the marbles' new owner.⁵⁹

When the pillars' inner faces were sliced away, the design symmetry of the front reliefs was destroyed. Either there was total disregard for overall appearance or the fragile cipollino split and suffered loss when the panels were sawn. Perhaps the capitals and bases of these supports were considered superfluous to their new use and thus discarded.

Further interference on the pillars reveals that the marbles did not end their days wrong way round framing a door. They had a tertiary use, and it is to this phase that the other amendments and additions belong. What functions the pillars later served is impossible to say. The differences in their treatment demonstrate different uses, but as the marbles

were eventually purchased together, they must have remained united at each site. Roughly treated areas of the pillars could also suggest that, at some later date, the marble was scavenged yet again for its fine material. Once the pillars ceased to be thought of as skillfully worked objects and were viewed merely as a commodity, their value lay solely in the quality of the marble. Cipollino was precious, and even small fragments may have been reused, perhaps for colorful mosaic tesserae in pavements.

The Metropolitan Museum's two ivied pillars illustrate the great value Romans placed on decorating their state or imperial buildings, and even quite minor garden structures. On these examples, the masterly carvings of flora and fauna cleverly echoed their original setting, evoking the pleasures of *al fresco* sight and sound. On these elegant twin pillars, the Roman desire for grandeur was tempered by the artist's subtlety and the refined taste of Emperor Hadrian to create marbles whose ingenious decoration, subtle color, and matchless quality continue to delight viewers.

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NOTES

1. Richter 1921, p. 14; "Classical Accessions" 1922, pp. 34, 35; Richter 1930, p. 228.
2. See Mathea-Förtsch 1999, p. 82.
3. Past literature (the accession reports and the label accompanying their present display) describes the marbles as pilasters. For the distinction between pillars and pilasters, see Ginouvès 1992, pp. 63–65.
4. *Ibid.*, p. 63n40.
5. Three-sided supports make up less than 4 percent of the total number of examples listed in Mathea-Förtsch 1999.
6. For the vessel shape, see Hilgers 1969, pp. 52–53, 156–59, no. 119. For examples of ornamented metal calyx-craters, see Pernice 1925, pp. 37–42, pl. XIV.
7. Compare the lower fragment of a pillar in the Magazzino Olearie, Museo Nazionale, Rome (inv. 112. 29; Mathea-Förtsch 1999, pp. 21, 157, no. 162, pl. 61, 3).
8. See the calyx-craters on a pillar (I.N. 1745) in the Ny Carlsberg Museum, Copenhagen, and on a fragment (S 113) in Sir John Soane's Museum (*ibid.*, p. 124, no. 60, pl. 87, 3; p. 128, no. 74, pl. 43, 2).
9. Comparable is a well-preserved marble calyx-crater (the foot is a modern restoration) with additional vegetal embellishment around the body in the Museo Capitolino, Rome (Galleria no. 31a, inv. 275; Grassinger 1991, pp. 189–90, no. 32, figs. 208–10).

10. A crater with sculpted figural reliefs around the bowl was used as a fountain and placed in a pool in the largest villa in Torre Annunziata near Naples. See De Caro 1987, pp. 96–97, no. 11, figs. 13, 45, and Jashemski 1979, pp. 311–14, fig. 480. See also the many garden paintings included in Jashemski 1979, pp. 55–82, and the catalogue of garden paintings and mosaics derived from garden representations in Jashemski 1993, pp. 313–404, app. 2.
11. For evidence of planting pots found in gardens of Pompeii, see Jashemski 1979, p. 240, and Jashemski and Salza Prina Ricotti 1992.
12. See a butterfly on the southern floral frieze of the Ara Pacis (Castriota 1995, fig. 27) and an image of a bird with a winged insect in its beak on a fragment in Sir John Soane's Museum (S 82; Mathea-Förtsch 1999, pp. 127–28, no. 73, pl. 93, 4). For butterflies, see Larew 2002, pp. 319–22, no. 4, order Lepidoptera.
13. Compare the forms and positions of two examples of the insect on wall paintings in Ciarallo and De Carolis 1999, pp. 58–59, fig. 7c,d.
14. See, for example, a wall painting in the House of Venus Marina (II.iii, 3) of a tree growing from a vessel. On one side a bird is perched, while on the other side one flies away (see Jashemski 1979, p. 65).
15. For ivy, see Baumann 1993, p. 87, fig. 160; Glaser 1997; and Jashemski, Meyer, and Ricciardi 2002, pp. 113–14, no. 63.
16. Matteucig (1974) has identified fifty birds on the frieze of the Eumachia building in Pompeii, but most of his identifications are questionable. For studies of the avian world, see Tammisto 1997 and Watson 2002. Watson takes a more critical approach to identifications.
17. See Watson 2002, pp. 398–99, no. 69, *Turdus philomelos* (song thrush).
18. A similar lizard is depicted on the south floral frieze of the Ara Pacis; see Castriota 1995, fig. 26. For the *Lacertia* species, see Bodson 2002, pp. 334–35, order Squamata: lizards and snakes.
19. See Watson 2002, p. 398, no. 67, *Troglodytes troglodytes* (winter wren).
20. For grasshoppers and crickets, see Larew 2002, pp. 322–24, no. 5, order Orthoptera. Compare the depictions of birds teasing grasshopper-like insects on the portal frieze on the building of Eumachia, Pompeii, in *ibid.*, pp. 318, 324, figs. 259, 271.
21. *Ibid.*, pp. 397–98, no. 68, *Turdus merula* (blackbird).
22. See, for example, a pillar formerly in the museum in Velletri, in Mathea-Förtsch 1999, p. 193, no. 277, pl. 98, 1.
23. The rat snake, *Elaphe longissima*, is a skilled climber (Bodson 2002, pp. 335–37, fig. 283, suborder: serpents, snakes).
24. Watson 2002, p. 378, no. 31, *Erithacus rubecula*.
25. For want of better terminology, any birds too generalized to identify amid the populated foliage on Roman decoration are usually called starlings or blackbirds; see Mathea-Förtsch 1999, pp. 18–19.
26. Examples span a wide chronological and topographical range. For a perceptive discussion of the theme in Greek and Latin literature and art, see Ghisellini 1988. Two traditions account for the subject's origin and popularity. In literature, it harks back to a passage in the *Iliad* (2.305–30) prefiguring the downfall of Troy. This venerable source found resonances in later ancient authors. The theme also exemplifies the ancients' interest in recording observed phenomena in the natural world in the spirit of Aristotle. The subject was very adaptable in its iconography and import. Ghisellini offers various interpretations of the motif according to context.
27. Compare the standardized heart shape of the ivy on a pillar fragment in the Vatican (Galleria Chiaramonti XXVI 14, inv. 1593; Mathea-Förtsch 1999, p. 162, no. 180, pl. 87, 2).
28. In a note of August 17, 1993 (MMA archives), Lorenzo Lazzarini identified the marble type. For *cipollino verde*, see Lambraki 1980, with a list of ancient literary sources. Some finished or partly finished columns were abandoned in many of the quarries; see *ibid.*, p. 57, fig. 22, for a map of the sites. See also Gnoli 1988, pp. 181–86; Lazzarini et al. 1995; Marchei 2001, pp. 202–3, no. 56, s.v. *cipollino*; and Lazzarini 2002, pp. 257–58. A map in Lazzarini 2002, p. 264, illustrates the locations of the most important quarries of colored marbles used by the Romans. See also Lazzarini and Sangati 2004, p. 93, fig. 37, “cipollino verde marmor carystium, marmor styrium.”
29. By the first century B.C., colored marble was being used to outfit houses and villas of the rich in Rome, and Pliny (*Natural History* 36.48) informs us that the first house in the metropolis to be adorned with only solid marble columns, some of *cipollino verde*, was that of a certain Mamurra, a knight from the town of Formia, who had served as Julius Caesar's chief engineer in Gaul.
30. Gnoli 1988, p. 182.
31. Kraus (1953, pp. 64–76) believed that Roman floral decoration derived directly from models in Pergamon, dated to Hellenistic times. In contrast, see the examination of the dating issue in Mathea-Förtsch 1999, pp. 28–43. On the basis of stylistic development, Mathea-Förtsch dates the examples from Pergamon to the last quarter of the first century B.C., when the reconstruction of the city began, and argues that their source was urban Roman architecture.
32. As a rule, pillars display three different types of compositions. The sides usually contain simple, matching candelabra; the front and back panels show plants with more decorative detail (see Mathea-Förtsch 1999, p. 6).
33. Only a small group of surviving pillars display the same plant on the two main panels and on both sides (*ibid.*, p. 193n1994, with examples).
34. See MMA 1987, frontis., pp. 126–27, no. 196; Mathea-Förtsch 1999, pp. 7n81, 133–34, no. 96, pl. 20, 1, 2; and Castriota 1995, pp. 48, 50.
35. For the category of the two Metropolitan pillars, see Mathea-Förtsch 1999, pp. 15–16, pls. 92–99, 1, 2. Doorposts often show the same iconography with foliage issuing from drinking vessels; see, for example, Mazzei 1982, p. 15, no. 1, 19 (without inv. no.).
36. Mathea-Förtsch 1999, p. 15nn173,174.
37. For the theme and development of this motif, see Toynbee and Ward-Perkins 1950 and Ovadia and Turnheim 1994. The repetition of similar layouts and individual images presupposes the frequent use of pattern books. See also Mathea-Förtsch 1999, pp. 17–21, who divides the fauna into two groups. One type depicts them at rest; the second relates to hunt scenes.
38. Mathea-Förtsch 1999, p. 59.
39. *Ibid.*, pp. 182–84, nos. 244, 245, 247, pls. 92; 93, 1–3; 96, 1–3; Oppen 2008a, p. 232, nos. 115, 116 (inv. nos. 1063 and 423540); p. 156, fig. 141 (a new photograph of inv. no. 1063). See also Mathea-Förtsch 1999, pp. 57–59 (an analysis of Hadrianic stylistic features); Moesch 1999, p. 242, no. 82; Moesch 2000, pp. 204–5, no. 20; and Oppen 2008b, pp. 66–67. In support of a Hadrianic date, compare the sculpting of the grape leaves on two of the pillars with those on the panel of Antinous-Silvanus, signed by Antonianos of Aphrodisias, now in the Banca Romana, Rome (inv. no. 418 A; Mathea-Förtsch 1999, Beilage 20, 2).
40. Pillars and pilasters of colored stone are the exception. Mathea-Förtsch (1999, p. 64) cites the few examples.
41. The main catalogue in Mathea-Förtsch 1999 lists 277 examples. Of these, only 14 pieces are carved with realistic flora.
42. For a description and the building history of the Canopus complex,

- completed after A.D. 133, see MacDonald and Pinto 1995, pp. 108–16; Grenier 1999, pp. 75–77; Salza Prina Ricotti 2001, pp. 241–63; Manderscheid 2002; and Hales 2003, pp. 83–90.
43. Excavations in 1987–88 on the west side of the adjacent landscape revealed that between planting beds—at the level of the scenic canal and the base of the walls that enclose the valley—was a series of intermediate terraces with supporting walls. For the gardens, see Salza Prina Ricotti 1987, pp. 175–78; Jashemski and Salza Prina Ricotti 1992, pp. 579–84; and Salza Prina Ricotti 2001, pp. 369–75. For the flowerpots found in the Canopus area, see Salza Prina Ricotti 2000. The area has been only superficially excavated.
 44. Salza Prina Ricotti 2001, pp. 249–56.
 45. Mathea-Förtsch 1999, p. 94.
 46. *Ibid.*, pp. 93–95, with reference to examples of garden buildings with painted pillars. Two pillar fragments were found in the Gardens of Maecenas (*ibid.*, pp. 149–51, nos. 138, 141, pls. 87, 5; 88, 1).
 47. Fragments of small columns and pilasters decorated with foliage adorned Roman gardens; see De Caro 1987, pp. 120–23, nos. 35–42, figs. 32–39. See also examples of small decorated pilasters in Seiler 1992, figs. 533, 534, no. 3, 554–56, no. 7, 558, 559, no. 10, 566–69, no. 13, 587, no. 23, 625, no. 50. The House of the Vettii (VI.xv.1) also has decorated columns in the garden (Jashemski 1993, pp. 154, 156, fig. 176). Peristyle F of the House of the Gilded Cupids (VI.Xvi.7) has painted and fluted columns (Seiler 1992, figs. 236–40). There are columns with foliage in the murals of the Villa Poppea, Oplontis (de Franciscis 1975, pp. 34–35, fig. 23; Lehmann 1953, pl. XIII).
 48. A group of pillar fragments from Cherchel, Algeria, are decorated on four sides and are of modest sizes. Scholars have suggested that they originally supported a small lightweight structure such as a pergola. See Fittschen 1979, pp. 241–42, 472–77, pls. 45–47, and Mathea-Förtsch 1999, p. 104, no. 2, fig. 79, 1, pp. 116–17, nos. 36, 38, 39. See also the catalogue and discussion of the various types of pillars from Cherchel in Pensabene 1982, pp. 150–63.
 49. Jashemski 1993, pp. 78–82, no. 133 (II.ii.2); Adam 1999, pp. 309, 311–13, fig. 718.
 50. For the vast size of the Canopus gardens, see Salza Prina Ricotti 2001, p. 370, fig. 134.
 51. The widths of the three pillar parts from Hadrian's Villa are preserved, showing that they varied in size. Mathea-Förtsch (1999) gives their approximate dimensions: no. 244: W. 10⁵/₈ in. (27 cm), H. 95⁵/₈ in. (243 cm); no. 245: W. 9 in. (23 cm), H. 81¹/₂ in. (207 cm); no. 247: W. 15 in. (38 cm), H. 134⁵/₈ in. (342 cm).
 52. One pillar from the Canopus (inv. no. 423540) contains Dionysiac paraphernalia, suspended from vine tendrils: cymbals, a pedum (shepherd's crook), a Pan mask, and two *cistae*, or sacred baskets (Mathea-Förtsch 1999, p. 184, no. 247, pls. 92, 1; 93, 1–3). For Dionysiac imagery in the Canopus, see Slavazzi 2000, p. 63, and Adembri 2000, pp. 81–84, 201, no. 18.
 53. For good introductions to the topic of the reuse of antiquities, see Kinney 2001, Hansen 2003, and Kinney 2006.
 54. For the fortunes of the resort complex after Hadrian's death, see MacDonald and Pinto 1995, pp. 197–330. For an overview of the colored marbles found there, see Salvatori, Trucchi, and Guidobaldi 1988 and Adembri 2002.
 55. For an excellent discussion on the practical problems of recycling marbles, see Rockwell 1993, pp. 192–96.
 56. Recycled pilasters decorated the Oratory of Pope John VII (A.D. 705–7) in Old Saint Peter's. The six vertical panels from pilasters (five are ancient; the sixth is contemporary) were applied to the walls (Brandt and Eggebrecht 1993, vol. 2, pp. 123–25, no. III-8). Ancient pilasters were also set into entrances in the Palazzo Lazzaroni in Rome; these marbles are unbroken and relatively unscathed (Mathea-Förtsch 1999, p. 158, no. 165, pl. 78, 4). For reused pilaster capitals in the Eastern and Western Empires, see Kramer 1994, pp. 65–72.
 57. The entrance of the southern facade of the Lateran Baptistery shows two reused pilasters flanking columns (Hansen 2003, pp. 70–73, fig. 49). For encasing doors, the easiest solution was the wholesale transfer of an ancient door surround. The main entrance of the west facade of Santa Sabina on the Aventine consists of a portal frame from a classical building (*ibid.*, pp. 26–27, figs. 10, 11). The doorframe of a building usually called Temple of Romulus, situated on the Forum Romanum, was also appropriated from another context (*ibid.*, pp. 41–42, fig. 18). Other examples are the main doorway of Santa Maria della Libera, Aquino (de Lachenal 1995, p. 175, fig. XVI.1). For the surround in Sant'Ambrogio, Milan, see Mathea-Förtsch 1999, Beilage 16, 3–5. Alternatively, doorposts could be assembled from ancient building materials. The northern entrance of Santa Sabina has jambs consisting of upended architrave blocks with a soffit forming the lintel (Brenk 1996, p. 50, figs. 1, 2).
 58. The date of introduction of the type of hinges on the Metropolitan marbles is unknown. For the different types of ancient door pivots and terminology, see Ginouvès 1992, pp. 55–56, pls. 24, 25. For examples of postclassical doors, see Schmitz 1905 and Jeremias 1980.
 59. Incongruous placement of recycled architectural features are known. The architrave of the “Porta del Paradiso” on the Duomo, Salerno, consists of an ancient doorpost, complete with crater, placed horizontally. See Mathis 2003, pp. 56–60, no. 18, figs. 18a–c.

BIBLIOGRAPHY

- Adam, Jean-Pierre
1999 *Roman Building: Materials and Techniques*. Translated by Anthony Mathews. London.
- Adembri, Benedetta
2000 “La decorazione minore del Canopo.” In Adembri, Melucco Vaccaro, and Reggiani 2000, pp. 81–84.
2002 “I marmi colorati nella decorazione di Villa Adriana.” In De Nuccio and Ungaro 2002, pp. 471–74.
- Adembri, Benedetta, Alessandra Melucco Vaccaro, and Anna Maria Reggiani, eds.
2000 *Adriano: Architettura e progetto*. Exh. cat., Villa Adriana, Tivoli. Milan.
- Baumann, Hellmut
1993 *Greek Wild Flowers and Plant Lore in Ancient Greece*. Translated and augmented by William T. Stearn and Eldwyth Ruth Stearn. London.
- Bodson, Lilian
2002 “Amphibians and Reptiles: Evidence from Wall Paintings, Mosaics, Sculpture, Skeletal Remains, and Ancient Authors.” In Jashemski and Meyer 2002, pp. 327–50.
- Brandt, Michael, and Arne Eggebrecht, eds.
1993 *Bernward von Hildesheim und das Zeitalter der Ottonen*. 2 vols. Exh. cat., Dom- und Diözesanmuseum, Hildesheim, Roemer- und Pelizaeus-Museum. Mainz am Rhein.

- Brenk, Beat
1996 "Spolien und ihre Wirkung auf die Ästhetik der varietas: Zum Problem alternierender Kapitelltypen." In *Antike Spolien in der Architektur des Mittelalters und der Renaissance*, edited by Joachim Poeschke, pp. 49–82. Munich.
- Castriota, David
1995 *The Ara Pacis Augustae and the Imagery of Abundance in Later Greek and Early Roman Imperial Art*. Princeton.
- Charles-Gaffiot, Jacques, and Henri Lavagne, eds.
1999 *Hadrien: Trésors d'une villa impériale*. Exh. cat., Mairie du 5e arrondissement, Paris. Milan.
- Ciarallo, Annamaria, and Ernesto De Carolis, eds.
1999 *Pompeii: Life in a Roman Town*. Exh. cat., Museo Archeologico Nazionale di Napoli. Milan.
- "Classical Accessions"
1922 M. E. C. "Classical Accessions. V. Roman Marbles." *Bulletin of the Metropolitan Museum of Art* 17, no. 2 (February 1922), pp. 33–36.
- De Caro, Stefano
1987 "The Sculptures of the Villa of Poppaea at Oplontis: A Preliminary Report." In MacDougall 1987, pp. 77–133.
- De Nuccio, Marilda, and Lucrezia Ungaro, eds.
2002 *I marmi colorati della Roma imperiale*. Exh. cat., Mercati di Traiano, Rome. Venice.
- Fittschen, Klaus
1979 "Ornamentpfeiler." In *Die Numider: Reiter und Könige nördlich der Sahara*, edited by Günther Walzik, pp. 241–42, 472–77. Exh. cat., Rheinisches Landesmuseum, Bonn. Cologne.
- de Franciscis, Alfonso
1975 *The Pompeian Wall Paintings in the Roman Villa of Oplontis*. Translated by Rosemary Kunisch. Recklinghausen.
- Ghisellini, Elena
1988 "'... Assidens inplumibus pullis avies serpentium adlapsus timet' (Hor., *Ep.*, I, 19–20)." *Xenia* 15, pp. 1–28.
- Ginouès, René
1992 *Dictionnaire méthodique de l'architecture grecque et romaine*. Vol. 2, *Éléments constructifs: Supports, couvertures, aménagements intérieurs*. Collection de l'École Française de Rome 84. Rome.
- Glaser, Fritz
1997 "Efeu." In *Der Neue Pauly: Enzyklopädie der Antike*, vol. 3, cols. 886–87. Stuttgart and Weimar.
- Gnoli, Raniero
1988 *Marmora romana*. 2d ed. Rome.
- Grassinger, Dagmar.
1991 *Römische Marmorkratere*. Monumenta Artis Romanae 18. Mainz am Rhein.
- Grenier, Jean-Claude
1999 "Le 'Sérapeum' et le 'Canope': Une Égypte monumentale et une 'Méditerranée.'" In Charles-Gaffiot and Lavagne 1999, pp. 75–83.
- Hales, Shelley
2003 *The Roman House and Social Identity*. Cambridge.
- Hansen, Maria Fabricius
2003 *The Eloquence of Appropriation: Prolegomena to an Understanding of Spolia in Early Christian Rome*. *Analecta Romana Instituti Danici*, suppl. 33. Rome.
- Hilgers, Werner
1969 *Lateinische Gefässnamen: Bezeichnungen, Funktion und Form römischer Gefässe nach den antiken Schriftquellen*. Düsseldorf.
- Jashemski, Wilhemina F.
1979 *The Gardens of Pompeii, Herculaneum and the Villas Destroyed by Vesuvius*. Vol. 1. New Rochelle, N.Y.
1993 *The Gardens of Pompeii, Herculaneum and the Villas Destroyed by Vesuvius*. Vol. 2. New Rochelle, N.Y.
- Jashemski, Wilhelmina F., and Frederick G. Meyer, eds.
2002 *The Natural History of Pompeii*. Cambridge.
- Jashemski, Wilhemina F., Frederick G. Meyer, and Massimo Ricciardi
2002 "Catalogue of Plants." In Jashemski and Meyer 2002, pp. 80–180.
- Jashemski, Wilhelmina F., and Eugenia Salza Prina Ricotti
1992 "Preliminary Excavations in the Gardens of Hadrian's Villa: The Canopus Area and the Piazza d'Oro." *American Journal of Archaeology* 96, pp. 579–97.
- Jeremias, Gisela
1980 *Die Holztür der Basilika S. Sabina in Rom*. Tübingen.
- Kinney, Dale
2001 "Roman Architectural Spolia." *Proceedings of the American Philosophical Society* 145 (June), pp. 138–61.
2006 "The Concept of Spolia." In *A Companion to Medieval Art*, edited by Conrad Rudolph, pp. 233–52. Malden, Mass.
- Kramer, Joachim
1994 *Korinthische Pilasterkapitelle in Kleinasien und Konstantinopel: Antike und spätantike Werkstattgruppen*. Tübingen.
- Kraus, Theodor
1953 *Die Ranken der Ara Pacis: Ein Beitrag zur Entwicklungsgeschichte der augusteischen Ornamentik*. Berlin.
- de Lachenal, Lucilla
1995 *Spolia: Uso e reimpiego dell'antico dal III al XIV secolo*. Milan.
- Lambraki, Anna
1980 "Le cipolin de la Karystie: Contribution à l'étude des marbres de la Grèce exploités aux époques romaine et paléochrétienne." *Revue archéologique*, no. 1 (1980), pp. 31–62.
- Larew, Hiram G.
2002 "Insects: Evidence from Wall Paintings, Sculpture, Mosaics, Carbonized Remains, and Ancient Authors." In Jashemski and Meyer 2002, pp. 315–26.
- Lazzarini, Lorenzo
2002 "La determinazione della provenienza della pietre decorative usate dai Romani." In De Nuccio and Ungaro 2002, pp. 223–65.
- Lazzarini, Lorenzo, et al.
1995 "Petrographic and Geochemical Features of Carystian Marble, 'cipollino verde' from the Ancient Quarries of Southern Euboea (Greece)." In *The Study of Marble and Other Stones Used in Antiquity*, proceedings of the III Asmosia Conference, May 17–19, 1993, Athens, edited by Yannis Maniatis, Norman Herz, and Yannis Basiakos, pp. 161–69. London.
- Lazzarini, Lorenzo, and Cristina Sangati
2004 "I più importanti marmi e pietre colorati usati dagli antichi." In *Pietre e marmi antichi: Natura, caratterizzazione, origine, storia d'uso, diffusione, collezionismo*, edited by Lorenzo Lazzarini, pp. 73–122. Padua.

- Lehmann, Phyllis Williams
1953 *Roman Wall Paintings from Boscoreale in The Metropolitan Museum of Art. Monographs on Archaeology and Fine Arts 5.* Cambridge, Mass.
- MacDonald, William L., and John A. Pinto
1995 *Hadrian's Villa and Its Legacy.* New Haven.
- MacDougall, Elisabeth Blair, ed.
1987 *Ancient Roman Villa Gardens.* *Dumbarton Oaks Colloquium on the History of Landscape Architecture, 10th: 1984.* Washington, D.C.
- Manderscheid, Hubertus
2002 "L'architettura dell'acqua a Villa Adriana con particolare riguardo al Canopo." In *Villa Adriana: Paesaggio antico e ambiente moderno; elementi di novità e ricerche in corso; atti del Convegno, Roma, Palazzo Massimo alle Terme, 23–24 giugno 2000*, edited by Anna Maria Reggiani, pp. 84–89. Milan.
- Marchei, Maria Cristina
2001 "Cipollino." In *Marmi antichi*, edited by Gabriele Borghini. Rome.
- Mathea-Förtsch, Marion
1999 *Römische Rankenpfeiler und -pilaster: Schmuckstützen mit vegetabilem Dekor, vornehmlich aus Italien und den westlichen Provinzen.* Mainz.
- Mathis, Paola
2003 "Salerno, duomo, architrave." In *Rilavorazione dell'antico nel medioevo*, edited by Mario D'Onofrio, pp. 56–60. Rome.
- Matteucig, Giorgio
1974 "Lo studio naturalistico zoologico del Portale Eumachia ne Foro Pompeiano." *Bolletino della Società dei Naturalisti in Napoli* 83, pp. 213–42.
- Mazzei, Marina
1982 "Stipite decorato su due lati." In *Museo Nazionale Romano: Le sculture*, vol. 1, part 3, *Giardino del Chiostro*, edited by Antonio Giuliano. Rome.
- MMA
1987 *The Metropolitan Museum of Art: Greece and Rome.* Text by Joan R. Mertens and Maxwell L. Anderson. New York.
- Moesch, Valeria
1999 "Pilier à décor végétal." In Charles-Gaffiot and Lavagne 1999, p. 242, no. 82.
2000 "Pilastris con decorazione vegetale." In Adembri, Melucco Vaccaro, and Reggiani 2000, pp. 204–5, no. 20.
- Opper, Thorsten
2008a *Hadrian: Empire and Conflict.* Exh. cat., British Museum, London. London.
2008b *The Emperor Hadrian.* London.
- Ovadia, Asher, and Yehudit Turnheim
1994 "Peopled" *Scrolls in Roman Architectural Decoration in Israel: The Roman Theater at Beth Shean/Scythopolis.* *Supplementi Rivista di archeologia* 12. Rome.
- Pensabene, Patrizio
1982 "La decorazione architettonica di Cherchel: Cornici, architravi, soffitti, basi e pilastri." In *150-Jahr-Feier, Deutsches Archäologisches Institut Rom: Ansprachen und Vorträge, 4.–7. Dezember 1979*, pp. 116–69. *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung*, 25, Ergänzungsheft. Mainz.
- Pernice, Erich
1925 *Gefässe und Geräte aus Bronze.* Berlin.
- Richter, Gisela M. A.
1921 "Greek and Roman Accessions." *BMMA* 16, no. 1 (January 1921), pp. 9–14.
1930 *The Metropolitan Museum of Art: Handbook of the Classical Collection.* 6th ed. New York.
- Rockwell, Peter
1993 *The Art of Stoneworking: A Reference Guide.* Cambridge.
- Salvatori, Antonio, Daniela Trucchi, and Federico Guidobaldi
1988 "The Marbles Used in the Decoration of Hadrian's Villa at Tivoli." In *Classical Marbles: Geochemistry, Technology, Trade*, edited by Norman Herz and Marc Waelkens, pp. 177–85. Dordrecht, the Netherlands.
- Salza Prina Ricotti, Eugenia
1987 "Water in Roman Garden Triclinia." In MacDougall 1987, pp. 135–84.
2000 "Vasi da fiori." In Adembri, Melucco Vaccaro, and Reggiani 2000, p. 202, no. 19.
2001 *Villa Adriana: Il sogno di un imperatore.* Rome.
- Schmitz, Wilhelm
1905 *Die mittelalterlichen Metall- und Holz-Türen Deutschlands: Ihr Bildwerk und ihre Technik.* Trier.
- Seiler, Florian
1992 *Casa degli Amorini Dorati (VI 16, 7. 38).* Häuser in Pompeji, vol. 5. Munich.
- Slavazzi, Fabrizio
2000 "I programmi decorativi della Villa Temi, colori, riflessi." In Adembri, Melucco Vaccaro, and Reggiani 2000, pp. 63–67.
- Spinazzola, Vittorio
1953 *Pompei, alla luce degli scavi nuovi di Via dell'Abbondanza (anni 1910–1923).* 2 vols. Rome.
- Tammisto, Antero
1997 *Birds in Mosaics: A Study on the Representation of Birds in Hellenistic and Romano-Campanian Tessellated Mosaics to the Early Augustan Age.* *Acta Instituti Romani Finlandiae*, vol. 18. Rome.
- Toynbee, Jocelyn, and John Ward-Perkins
1950 "Peopled Scrolls: A Hellenistic Motif in Imperial Art." *Papers of the British School at Rome* 18 (1950), pp. 1–43.
- Watson, Georg E.
2002 "Birds: Evidence from Wall Paintings, Mosaics, Sculpture, Skeletal Remains and Ancient Authors." In Jashemski and Meyer 2002, pp. 357–400.