

Hieronymus
Cock's *Baths*
of Emperor
Diocletian
(1558) and
the Diascopic
Architectural
Print

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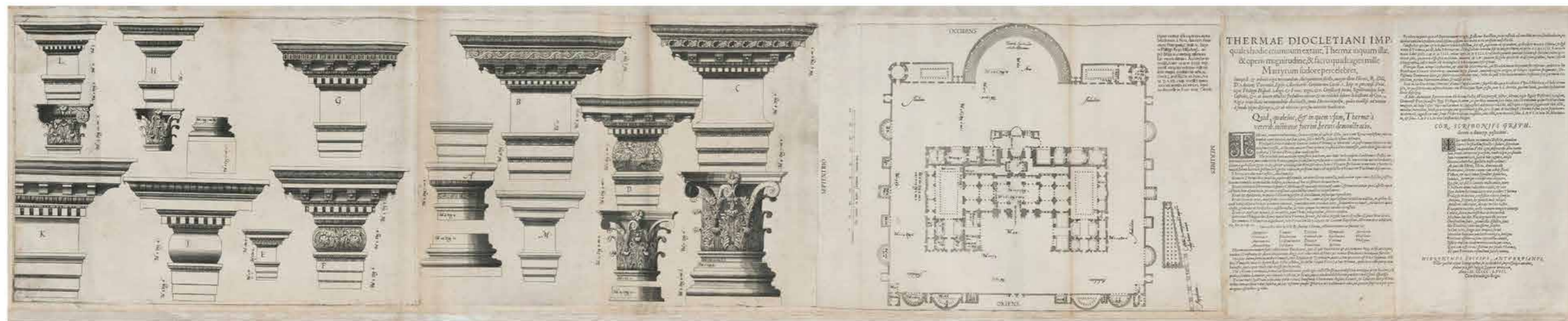


Fig. 3.1
Joannes and Lucas
van Doetecum,
after Sebastian
van Noyen,
*Architectural details
and ground plan
of the Baths of
Diocletian*; Cornelis
de Schrijver,
*Introduction and
dedicatory poem*,
from *Thermae
Diocletiani
Imp.* (Antwerp:
Hieronymus Cock,
1558). Etching and
letterpress, 44 x
209.5 cm. London,
Royal Academy
of Arts, 12-1324.
Photo: © Royal
Academy of Arts,
London.



Fig. 3.2
Joannes and Lucas
van Doetecum,
after Sebastian
van Noyen, *South
side of the Baths
of Diocletian*,
from *Thermae
Diocletiani
Imp.* (Antwerp:
Hieronymus Cock,
1558). Etching,
43.8 x 253.5 cm.
London, Royal
Academy of Arts,
12-1325. Photo: ©
Royal Academy of
Arts, London.

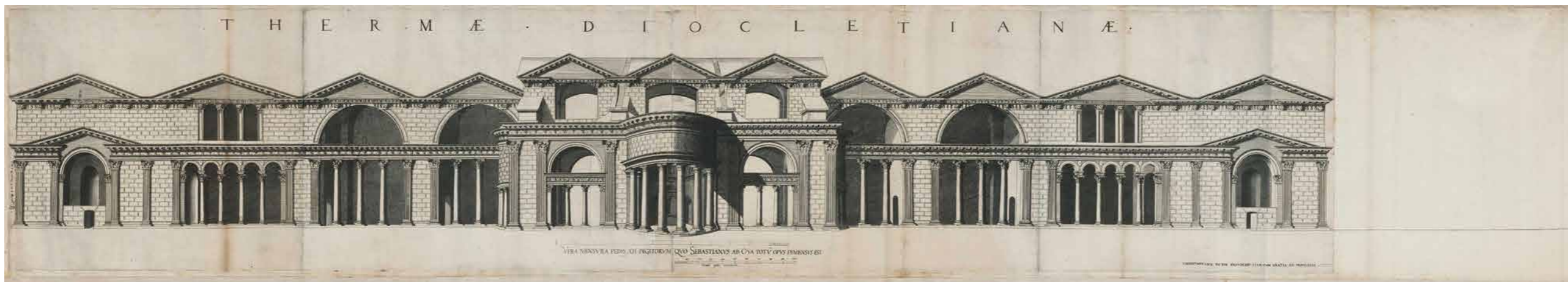
At the Royal Academy in London there is an extraordinary architectural publication of overwhelming dimensions.¹ Composed of twenty-seven large etchings, five smaller cut-out prints, and two letterpress sheets mounted on six pieces of linen, it measures over sixteen metres when placed end to end (figs 3.1–3.6). These individual prints are impossible to take in with a single glance and difficult to comprehend at a distance. Rather, once unrolled, one slowly pans across each composite etching, which are titled in large classical lettering THERMÆ DIOCLETIANÆ, ‘The Baths of Diocletian’, the largest bathing complex of the ancient world.

Printed in Antwerp in 1558 they together form a complex visual scheme. Take one of the largest prints of the series, measuring over three metres in length (fig. 3.6). The immensity of the structure is immediately striking. Lofty vaulted rooms and vast open areas dwarf small groups of figures. An accompanying scale and measurements in feet (down to the minute) reiterate the imposing size of the building, and attest as well to this representation’s veracity. Above the scale, a short label clarifies that the viewer is looking across the middle of the bath complex, longitudinally from east to west. This interior side view reveals a series of spaces that unfold horizontally. As one surveys this continuous architectural progression, its splayed one-point perspective pulls the viewer inward. Heavy shadows additionally give the structure depth, which seems to otherwise float in the abstract space of the page without a background or horizon line. The representation draws the eyes across the expansive structure as well as into its constituent spaces. It even propels the viewer’s gaze through the walls of the ancient complex, which have been sliced vertically, straight through its masonry and concrete core. In one etching, which depicts the building laterally, this cut even

extends underground to expose a system of water pipes (fig. 3.4). It also continues rearward, peeling away part of the main structure to expose a quadrant of a domed bathing room labelled *balneum*, complete with spiral staircase and octagonal coffering.

More than merely unusual images combining cross-section and perspective, this essay argues that these horizontal views constitute what I am terming a *diascopic* way of depicting architecture. Derived from the Greek prefix *dia-* (through and across) and verb *skopein* (to see, view, look, examine, behold, and consider), the term encompasses both a method of representation and a mode of viewing. As a technique, it emerged from the experimental drawing practices of early modern architectural culture and the study of antiquity. It relied on surveying technology refined by military engineers and cartographers, and it was partially inspired by panoramic city views. At the same time, unlike later circular painted panoramas that proliferated in the nineteenth century, the prints of the Baths of Diocletian do not attempt to represent the totality of a view or to create an immersive environment. They instead force the viewer to pan each of their images, looking across and through the ancient structure at a variety of different points. The building is thus progressively revealed in scroll-like fashion as a series of exceedingly long, vertical planes that stretch the field of vision and expand the realm of the visible. Diascopic representation in this manner acted as a tool of dissection that clarified the complex ancient structure for the observer. It was also an instrument of resurrection, augmenting traditional methods of reconstruction to breathe new life into the heavily ruined edifice. By mobilising this new means of envisioning and experiencing antiquity, the makers of these prints also created an architectural monograph that

Fig. 3.3
Joannes and Lucas
van Doetecum,
after Sebastiaan
van Noyen, *West
side of the Baths
of Diocletian*,
from *Thermae
Diocletiani
Imp.* (Antwerp:
Hieronymus Cock,
1558). Etching,
44.3 x 251.5 cm.
London, Royal
Academy of Arts,
12-1326. Photo: ©
Royal Academy of
Arts, London.



broke with the traditional codex format and explicitly sought to preserve a work of architecture through the modern medium of print. These etchings of the Baths of Diocletian therefore herald the emergence of a new form of architectural publication and mode of visualisation, one which harnessed the potential of the near-continuous page.

Reconstructing the Baths and Enlivening Antiquity

Entitled *Thermae Diocletiani Imp.* ('Baths of Emperor Diocletian'), the publication consists of five views of the baths: a section from south to north through the middle of the structure (fig. 3.5) and another from east to west (fig. 3.6), as well as a southern exterior elevation of the central block (fig. 3.2), one from the western side (fig. 3.3), and a third from the east (fig. 3.4).² There is also a plan of the complex and two etchings of architectural elements labelled with letters that key them to details in the other prints (fig. 3.1). In the Royal Academy copy, these sheets are pasted alongside two pages of letterpress text, but in other examples, this bifolium serves as an introduction to the publication. At least twenty-one complete or partial sets survive today.³ Most of these are folded up and bound into books, often in different arrangements, while a few are preserved as rolled-up scrolls.⁴ Some may have originally been mounted on walls, like many other large-scale prints, but little physical evidence of this practice survives today. Only examples at the Royal Academy, Herzogin Anna Amalia Bibliothek, Bibliothèque de l' Arsenal, Kungliga Biblioteket, and Kunsthistorisches Museum feature five additional etchings that were cut out, mounted on paper, and connected by a hand-drawn, measured line. This augmentation may have been limited to only deluxe editions, or perhaps, after proving too laborious, it was simply abandoned for the sake of economy.

This monumental publication was a collaborative effort. Printed by Hieronymus Cock, whose *Aux Quatre Vents* ('At the Sign of the Four Winds') press became one of the largest print publishing houses in Europe, it was financially supported by Antoine Perrenot de Granvelle, the wealthy Bishop of Arras. Granvelle commissioned the architect Sebastiaan van Noyen to produce drawings of the Baths of Diocletian, which the brothers Johannes and Lucas van Doetecum

transformed into etchings, and Cock enlisted the poet and humanist Cornelis de Schrijver (also known as Cornelius Grapheus and Scribonius) to write a short Latin introduction describing the baths and their history, as well as a laudatory dedication in verse to the bishop. As Edward Wouk has shown, Granvelle played a critical role in Hieronymus Cock's early success as a publisher.⁵ He not only helped bring Mantuan engraver Giorgio Ghisi to Antwerp, whose technical skill and knowledge of Italian art Cock quickly exploited, but he also provided funding for the publisher's first major work, a set of etchings printed in 1551 and entitled *Praecipua aliquot Romanae antiquitatis ruinarum monumenta...* ('Some particular monuments among the ancient Roman ruins', also known as the *Large Book of Ruins*).

Sponsorship of such projects was essential. While the market for antiquarian publications in the Low Countries had grown substantially by the mid-sixteenth century, in 1546 Pieter Coecke van Aelst still lamented that because 'lovers of ancient architecture are very limited', it would be difficult for him to recoup the substantial production costs of his Flemish translation of Sebastiano Serlio's book on antiquities.⁶ Granvelle was a natural patron for such work. Active in Roman antiquarian circles, he sought out antiquities and amassed a substantial art collection, which he displayed in a classicising gallery added to his Brussels palace. He was also a collector and connoisseur of prints, who used his sizable fortune to assemble a large library including many architectural books.⁷ Like other ambitious politicians and prelates, Granvelle's patronage of the arts and promotion of antiquity was at the same time a means of self-aggrandisement. The 1558 *Baths of Emperor Diocletian* indeed proudly proclaims in its introduction that Granvelle had brought the structure 'to light, at his expense, and with passion for the study of venerable antiquity'.⁸

The vision of antiquity that Cock propagated with Granvelle's support was by no means uniform. *The Large Book of Ruins*, for example, contains twenty-four etchings of a variety of deteriorating ancient Roman monuments (fig. 3.7).⁹ Inspired by earlier drawings made in Rome by Netherlandish artists such as Maarten van Heemskerck, as well as contemporary landscape paintings—the type Cock likely produced before turning to printmaking—these views depict the ancient city as a decaying corpse, littered with partially collapsed monuments covered with vegetation.¹⁰ Sketchy, acid-etched lines executed by Cock himself amplify the sense of ruin and



Fig. 3.4
Joannes and Lucas
van Doetecum,
after Sebastiaan
van Noyen, *East
side of the Baths
of Diocletian*,
from *Thermae
Diocletiani
Imp.* (Antwerp:
Hieronymus Cock,
1558). Etching,
44.4 x 353 cm.
London, Royal
Academy of Arts,
12-1327. Photo: ©
Royal Academy of
Arts, London.

Fig. 3.5
Joannes and Lucas
van Doetecum,
after Sebastiaan
van Noyen, *Lateral
section of the Baths
of Diocletian*,
from *Thermae
Diocletiani*
Imp. (Antwerp:
Hieronymus Cock,
1558). Etching,
44.2 x 308 cm.
London, Royal
Academy of Arts,
12-1328. Photo: ©
Royal Academy of
Arts, London.



evoke the atmospheric effects of decomposition. The result is a series of prints that render once pristine architecture progressively incoherent, transforming it into what others have described as picturesque pure form suited for reuse and formless images that spurred creative engagement.¹¹ Although the title page of the publication promises verisimilitude, and each print is identified topographically (albeit sometimes erroneously), the prints privilege effect over content.

The Baths of Diocletian (fig. 3.7), for instance, are shown in this earlier series through an impossible splayed perspective which removes still-extant vaulting to expose an empty ruinscape where the caldarium, tepidarium, and frigidarium once stood. This is in stark contrast to the 1558 etching of the same series of spaces (fig. 3.6). Here the individual parts of the ancient structure, down to the architectural sculpture, have instead been restored. The Van Doetecum brothers carefully incised the architecture into the waxy ground of the copper etching plate with compass and rule and finely rendered with horizontal, vertical, and diagonal hatching. Only the interior masonry, exposed by the sectional cut, is articulated with small irregular lines. These methods of delineation and shading, which at times appear almost like engraving with a burin, contrast with those of the earlier print, where no two etched lines are parallel and the crumbling masonry merges with the rugged terrain below.

In the 1551 print, Cock thus exaggerated the ruinous nature of the baths. He also accentuated its darkness, placing two men frantically fleeing another pair wielding swords. Ruins had long been seen as unhealthy, nefarious places that were products of violence and avarice.¹² The Baths of Diocletian was even said to be inhabited by the devil until Filippo Neri expelled him in 1551.¹³ In Cock's later publication, the structure is cleansed of this architectural and human disorder. Panning the sequence of spaces, the viewer instead encounters tidy groups of figures: a martial cavalcade, two men walking in conversation, and another pair gazing and gesturing upward (fig. 3.8). These figures mirror the surrounding architectural order, while also encouraging the viewer to mimic their actions and follow their movements to better understand the building around them.

This reconstructive aspect at work within the 1558 prints is in large part the product of Sebastiaan van Noyen, a military engineer and architect who served emperors Charles V and Phillip II before his death at the age of thirty-four in 1557.¹⁴ Originally from Utrecht, he worked alongside established Italian military architects Donato de Boni di Pellizuoli and Giovanni Maria Olgiati, before rising to the rank of architect-general of imperial fortifications. In this role, he



Fig. 3.6
Joannes and Lucas
van Doetecum,
after Sebastiaan
van Noyen,
*Longitudinal
section of the Baths
of Diocletian*,
from *Thermae
Diocletiani*
Imp. (Antwerp:
Hieronymus Cock,
1558). Etching,
44.3 x 310 cm.
London, Royal
Academy of Arts,
12-1329. Photo: ©
Royal Academy of
Arts, London.

supervised the construction and renovation of fortifications throughout the Low Countries.¹⁵ Krista de Jonge has suggested that Van Noyen likely travelled to Rome around 1550, and upon his return, possibly designed the garden gallery for Granvelle's palace in Brussels (c.1551–54), which took inspiration from the courtyard of the Palazzo Farnese.¹⁶ The introduction to the 1558 publication tells us that Van Noyen, at the instruction of Granvelle, had 'measured and drawn these ruins' and 'precisely recorded [them] from life (*ad vivum*) from the ground upward'.¹⁷ These written assertions of veracity and autoptic study were part of a growing trend in sixteenth-century print culture, one that sought to affirm the objectivity and indexicality of mechanically reproduced images, be they portraits, maps, or botanical illustrations.¹⁸ The etchings of the *Baths of Emperor Diocletian* reiterated these claims of accuracy throughout with measurements in palmi, digiti, and minuti. Each also features a scale in pes maior, despite the fact these images cannot yield accurate measurements due to their perspectival rendering.¹⁹ One of the etchings (fig. 3.3) even includes a larger ruler labelled 'the genuine scale in feet (*pedes*) with twelve fingers (*digiti*) that Sebastiaan van Noyen measured the whole work', which does not correspond to others provided.²⁰ Measuring thirty-two and a half centimetres in length, it is instead exactly the same size as the French Royal foot. This metrical dissonance is perplexing. While the 1:1 scale ruler should enable the user to translate the prints into any unit of measure, making them universally comprehensible, the numerical figures provided in the etching appear to conform instead to the ancient *palmus*, as understood in the Renaissance, while those of the introductory text are equivalent to the Roman *pes*.²¹ The architect thus converted his survey into an ancient unit of measure, perhaps to render it historically authentic.

It is also likely Van Noyen relied in part on the work of others. This was not uncommon. Hieronymus Cock, in fact, also published around 1558 an etching of the Mausoleum of Halicarnassus that is nearly identical to the reconstruction produced by an artist in the circle of Antonio da Sangallo the Younger.²² Even in Rome itself, artists and architects continually copied drawings of ancient Roman buildings throughout the sixteenth century.²³ Documenting the entirety of the Baths of Diocletian—an immense structure so incomprehensible and difficult to measure in its ruined state that Sebastiano Serlio explicitly chose not to reconstruct its elevation in his book on antiquities—would have been a herculean task requiring a team of workmen.²⁴ Just such an undertaking was afoot in Rome at the same time Van Noyen visited the city. From the 1540s onward, a group of mostly French-speaking draftsmen produced hundreds of minutely

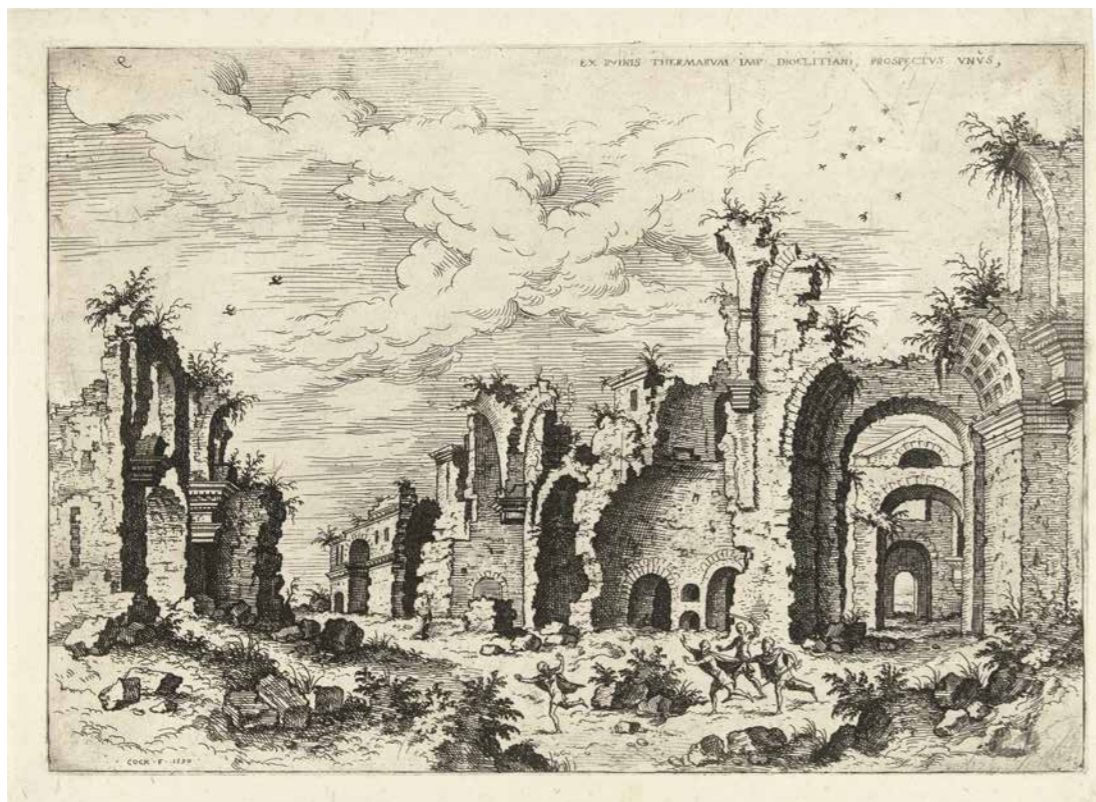


Fig. 3.7
View of the Baths
of Diocletian,
from Hieronymus
Cock, *Praecipua
aliquot Romanae
antiquitatis
ruinarum
monimenta...*
(Antwerp: 1551).
Etching, 23 x 32.8
cm. Amsterdam,
Rijksmuseum, RP-
P-1882-A-6453.
Photo: ©
Rijksmuseum.

detailed surveys of Roman buildings, many preserved today in the so-called ‘Codex Destailleur D’ and other related albums.²⁵ These include sketches of the Baths of Diocletian in section and elevation, copiously measured in French feet, keyed with letters to nearby architectural details, and drawn over three attached pieces of paper (fig. 3.9). Executed in pen atop faint black chalk outlines, these drawings closely recall the diascopic images of the *Baths of Emperor Diocletian*.²⁶ In fact, they appear almost like preparatory studies for the later etchings. It is impossible to know if Sebastiaan van Noyen helped create these drawings; he certainly would have had contacts with the French-speaking community in Rome through Granvelle, who since 1540 had been the bishop of the Burgundian town of Arras. Yet Van Noyen did not simply reproduce these precise surveys. He instead transformed this raw material, adding ornament, sculpture, and perspective, while also omitting incongruous architectural details and superfluous measurements. The architect therefore created something distinctly new, which was grounded in archaeological study, but not purely antiquarian. At some point in the 1570s, Andrea Palladio followed a comparable procedure, using drawings he had assembled in Rome three decades earlier to create sectional views of the Baths (fig. 3.10). But in the case of these drawings, which Palladio intended for publication, the architect also looked to Cock’s monumental prints for inspiration, copying some of its details exactly. A few of the drawings even attempt to rival the scale of the etchings, stretching over a metre and a half in length.²⁷

Despite their similarities, the Destailleur drawings are also significantly different from the reconstructions of Van Noyen in their employment of a rigorously orthogonal method of representation. Scholars have often highlighted the use of orthography—the rendering of a structure’s exterior or interior as a two-dimensional vertical plane without perspectival distortion—as indicative of the rise of objectivity in Renaissance architecture.²⁸ It has also been tied to the writings of Alberti and Raphael, who claimed architects should create orthogonal drawings with parallel and perpendicular lines, rather than painterly perspectives for purposes of clarity and mensuration. But as others have noted, architects rarely treated these modes of representation as oppositional.²⁹ It is a modern teleology that drawing progressed from pictorial practice to mathematical science. Rather, artists and architects throughout the Renaissance simultaneously

embraced a wide variety of methods of representation for different purposes, such as the rendering of interiors, where orthogonal projection most clearly met its limits.³⁰

In the case of the Baths of Diocletian, perspective served as an essential tool for the documentation and reconstruction.³¹ Already in the late fifteenth century, an unknown draftsman created a series of perspectival drawings dissecting the spaces of the ancient structure (fig. 3.11).³² Some of these take the form of horizontal views, somewhat akin to those produced by Van Noyen over a half century later. Others peel away the columns and walls of the baths, leaving a vestigial plan to elucidate the structure’s interior. In doing so, these drawings also implicitly reveal the procedure by which the building came into being from abstract plan to material edifice. Later architects elaborated on this process. For example, a member of Raphael’s circle (known as Master C of 1519), in an album of drawings now in Vienna, achieved this effect through a process of selective ruination (fig. 3.12).³³ This technique of decortication, which had been pioneered by Giuliano da Sangallo, enabled the draftsman to render the complex spatial qualities of the different bathing halls. Each highly finished interior rendering, moreover, is labelled with a letter corresponding to a location on an accompanying ground plan. These topographic reference points transformed the cut-away views into a sequence of spaces, giving the ichnographic plan material presence and empowering the viewer to move virtually through the ancient structure. Drawings such as these thus anticipated the diascopic reconstructions of van Noyen, which similarly offered the viewer an active perceptual experience.

Like many ancient Roman monuments, the Baths of Diocletian fell into ruin over time.³⁴ While in the 1440s Poggio Bracciolini still marvelled at its ‘numerous columns, many of great size, and various kinds of marbles’, by the sixteenth century the marble-clad brick and concrete structure stood mostly denuded and covered with vegetation.³⁵ The *Baths of Emperor Diocletian*, in contrast, presents an image of antiquity reborn, seemingly brought back to the moment of its dedication in

306 CE, complete with elaborately adorned coffered vaults and a profusion of statuary. This regenerative effect, however, is not as simple as it first appears. As one looks closely across these etchings, the appearance of historical unity and aesthetic homogeneity is, in fact, disturbed. In the two north-south sections of the baths (figs 3.4 and 3.5), figural sculpture only turns up on the right-hand side of the building. The switch is striking. On the *natatio* wall, empty niches and aedicules suddenly are populated with a variety of gigantic protruding statues, evoking a theatrical *scanenae frons*, while in another print an Emperor in a

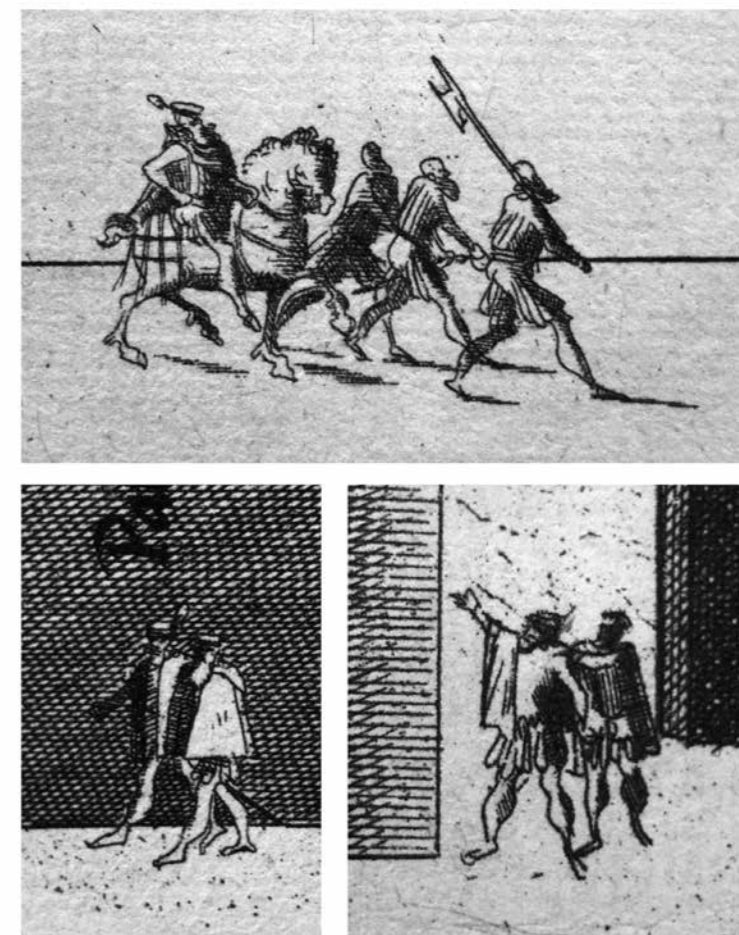
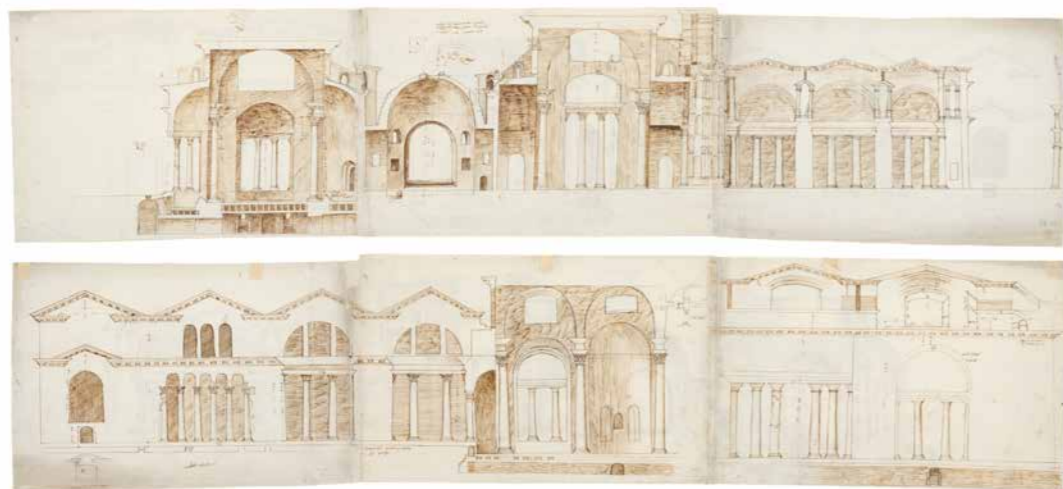


Fig. 3.8
Details from fig. 3.6

Fig. 3.9
Elevations and sections of the Baths of Diocletian (c.1540–55). Pen and ink on paper, 28 x 127.3 cm. Berlin, Staatliche Museen zu Berlin, Kunstbibliothek, Hdz 4151 (Codex Destailleur D), fol. 41r–v. Photo: © bpk / Kunstbibliothek, Staatliche Museen zu Berlin / Dietmar Katz.



quadriga participates in a triumphal procession (fig. 3.13). The creators of these etchings may have employed this representational technique to reveal different layers of information, with one side clarifying the architectural form and the other offering the decorative program, albeit one without a clear iconography. It may perhaps also illustrate alternative schemes for reconstruction. Either way, the visual dichotomy calls attention to the artificial nature of the image, exposing it as a work of interpretation.

Looking still closer at the largest etching (fig. 3.4), another possible reading emerges. Examining this image from left to right, one first encounters an aqueduct and cistern below. The accompanying text describes how water is first diverted to this reservoir and then flows through channels to the baths. Following this fresh water, one next comes upon a semicircular bathing hall with large basins emptying into waste water pipes. A schematic representation of the complex ancient hydraulic infrastructure then continues underground, drawing the eye across the entire print—some three metres—to a symmetrical bathing hall at the far end.³⁶ Yet, whereas the basins of the first space stand empty, like the architectural niches above, here figures suddenly appear. At left, a younger and older woman bathe while engaging in conversation, and to the right, a boy holding a pouch of oil (known as a *guttus*) prepares to scrape the skin of an older man with a strigil as their tub fills with water from animal-head-shaped spouts (fig. 3.14). On the wall behind them, a towel is hung alongside other bathing instruments. As one visually traverses the etching, the reconstruction is thus progressively enlivened: first by simulating the progression through architectural space with the aid of perspective; then through the appearance of moving water and figural sculpture; and finally, with the emergence of human figures inhabiting the structure and caught in the ancient act of bathing. These partially nude men and women, in turn, activate the surrounding over-life-sized statuary, making the pagan likeness appear to come to life. The older woman, for instance, looks up and gestures to one of the statues, who returns her gaze and stretches out his hand. These stone or bronze sculptures in fact seem to move more than their miniature human analogues below. Even the architectural vault above appears to come to life with foliage sprouting from the heads of outstretched eagles.

Antiquity here is not just reconstructed, but reanimated. This process of vivification, moreover, is not just superficial artistic elaboration. The bathers are in fact an antiquarian quotation, modelled on a woodcut published in Fabio Calvo's 1527 *Antiquae urbis Romae* (fig. 3.15), and later reprinted by Guillaume du Choul in his 1554 book on ancient bathing and exercise.³⁷ The choice to label this structure *balneum*, a Greek term for modest private baths, similarly comes from this print. Cornelis de Schrijver additionally utilised Du Choul's work when crafting his Latin introduction to the *Baths*. He also cites passages from Vitruvius and Alberti as well as Hubertus Goltzius' 1557 book of imperial effigies: one of the prints (fig. 3.6) even contains a medal of Diocletian copied directly from this contemporary publication.³⁸

These different forms of erudite visual and textual quotation would have appealed to

educated viewers skilled in intertextual study. For this audience, the text of the publication further emphasised the project of enlivening antiquity. In his dedicatory poem, De Schrijver chronicled how Granvelle, grieved at the fate of the Baths of Diocletian, which stood as a 'collapsed ruin' and 'a sad rotting cadaver', 'partially buried' in a 'squalid tomb', until he 'discovered a remedy' and 'resurrected it from the grave'. These analogies, which draw on the established humanist tropes of building-as-body and Rome-as-corpse, emphasised the corporality of the ancient structure. Granvelle, according to the *laudatio*, 'awakened alive again' what had 'gradually fallen from memory', creating a restored building that would 'remain standing through the ages'. What once had 'fallen to the ground under its massive weight', now again 'equalled vast mountains...rising to the sky in renewed form'. Through this publication, the Baths of Diocletian, 'built from the sacred sweat of Christians', were literally reborn and would endure the ravages of time, never again falling to ruin. For this achievement, the author proclaims, Granvelle's name, like the resurrected building, will resound for centuries.³⁹

The patron of this project is thus celebrated as the restorer of antiquity. Claiming it as his own, Granvelle promoted an image of cultural superiority, antiquarian erudition, and piety, perhaps as a means of ingratiating himself with the newly crowned Emperor Philip II with whom he had recently fallen out of favour.⁴⁰ This triumphant appropriation of antiquity is reiterated in a pair of monumental inscriptions hovering above the baths (fig. 3.6). Both written in Latin and rendered in Roman square capitals, one commemorates the building's ancient dedication, the other its modern recreation. Treated as equal laudatory acts, the latter inscription specifically celebrates the Bishop of Arras, for having had the Baths of Diocletian 'measured and drawn', 'engraved on copper', and 'published' to 'protect them from inevitable destruction'.⁴¹ Granvelle therefore had not only breathed new life into this ancient edifice, but through mechanical reproduction also preserved it for posterity.

The diascopic etchings, produced by the Van Doetecum brothers after drawings by Van Noyen, ensured the baths would endure forever in reconstructed form. A detailed examination of these printed images, though, calls these celebratory claims into doubt, exposing the tensions of reconstruction and raising the question of whether antiquity had actually been revived. On the surface, the elaborate architecture of the baths appears pristine. The bathing figures, unlike the others depicted (fig. 3.8), are also clearly ancient, signifying that the passage of time itself has been erased. This semblance of a restored, revived past, however, is not universal. The aqueduct

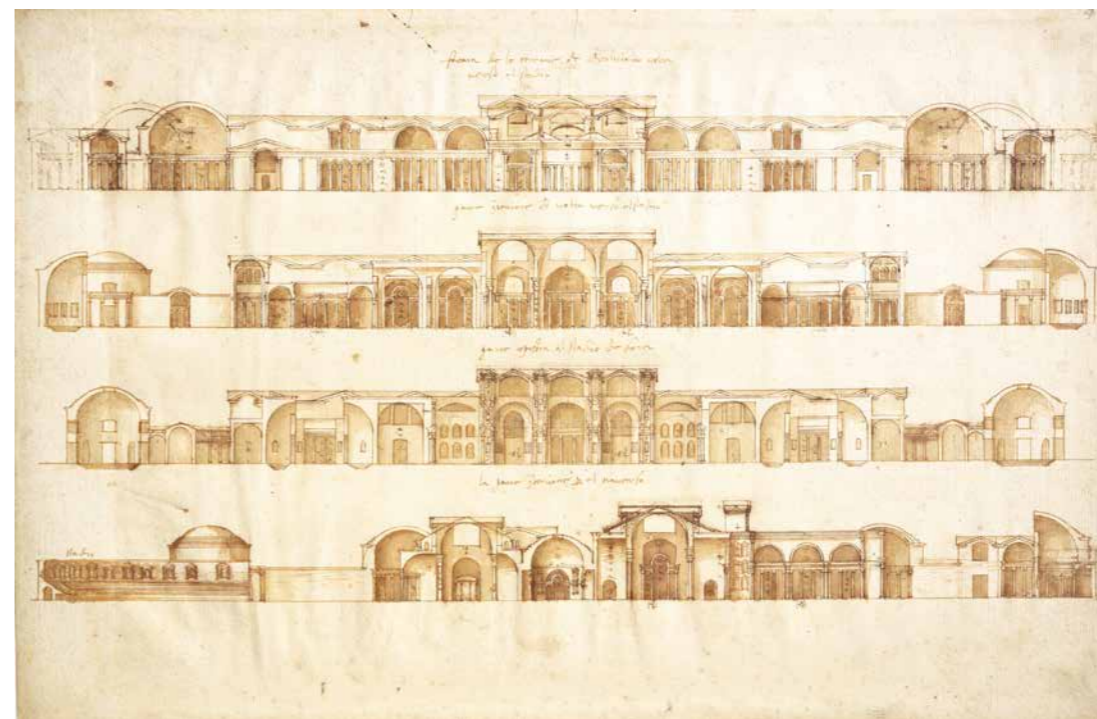
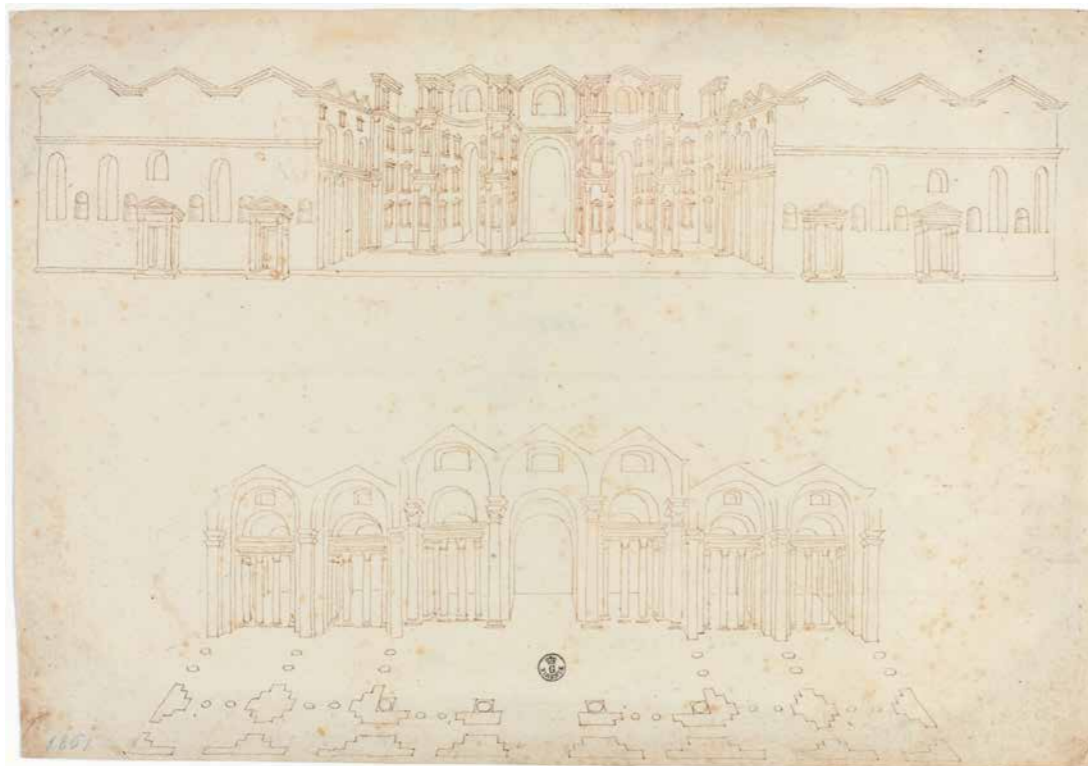


Fig. 3.10
Andrea Palladio,
Sections of the Baths of Diocletian (c.1570s). Pen and ink on paper, 28.7 x 43.2 cm. London, Royal Institute of British Architects, V/2r. Photo: © RIBA Collections.

Fig. 3.11
Main building and
Central Hall of the
Baths of Diocletian
(late fifteenth
century). Pen and
ink on paper, 23.5 x
33.7 cm. Florence,
Galleria degli
Uffizi, Gabinetto
dei Disegni e delle
Stampe, 1861 Ar.
Photo: © Gabinetto
Fotografico delle
Gallerie degli Uffizi.

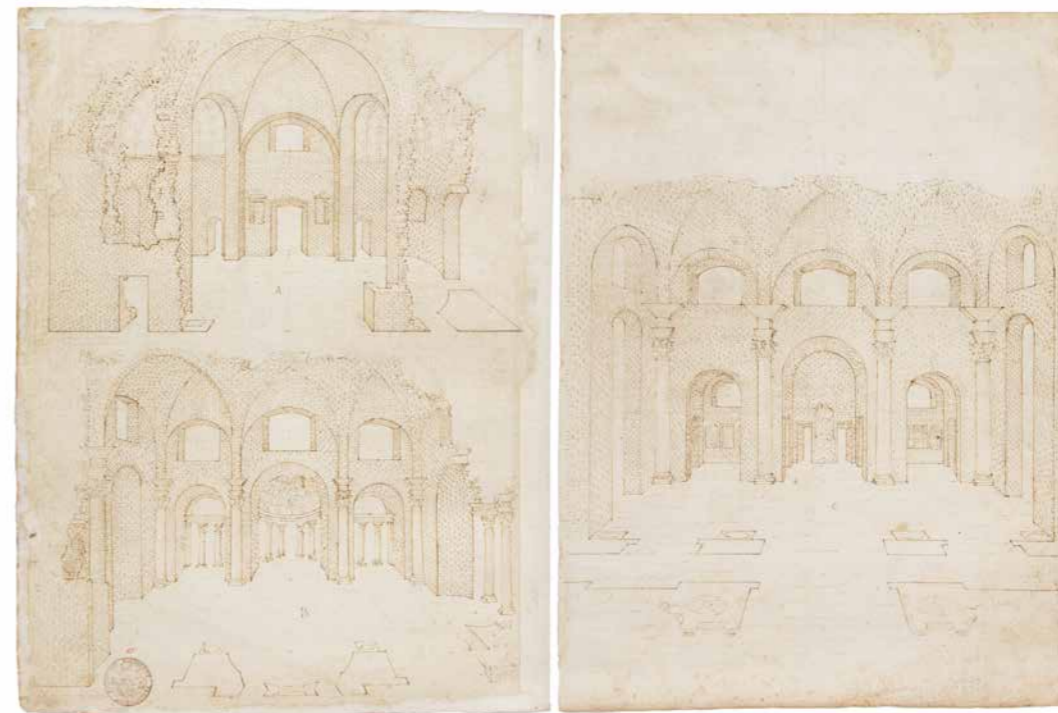


that brings water to the baths is actually severed and vegetation sprouts from various walls (fig. 3.16). At the edges of three combined prints (figs 3.2, 3.3, and 3.5), small pasted etchings give the impression of an abandoned building falling into ruin. The boundaries here between real and imaginary are blurred. Is this the Baths of Diocletian as it was, as it is, or a dehistoricised hybrid that can only exist on paper? While at times this ruination reveals additional information, like the early Master C drawings (fig. 3.12), in other places it obscures the architecture. Looking across these etchings, the ancient structure seems rather to oscillate from present to past and back again, making visible the implicit process of reconstruction. It also foreshadows future decay, insinuating that underneath this resurrected building lies a derelict structure, the type Cock had already illustrated (fig. 3.7). This visual temporal dissonance seems to highlight Renaissance anxieties of enlivenment. While antiquity may appear reborn, the etchings suggest that Granvelle, even with a team of artists, architects, and humanists, could never fully bring the ancient baths back to life. It was always already a ruin.

Toward a Diascopic Architectural Print

The *Baths of Emperor Diocletian* was unlike any other architectural publication produced in the Renaissance. Its diascopic etchings, nevertheless, were grounded in a variety of intertwined traditions, developments, and viewing practices linked to various types of large-scale drawings and prints. Graphic representations of architecture, for example, had been produced on a grand scale across Europe since the late medieval period.⁴² Thirteenth-century drawings for the facade of Strasbourg Cathedral, some of the earliest that survive, already measure around three and a quarter metres.⁴³ Some later examples, such as those for the north tower of St Stephen's Cathedral in Vienna, stretch to five metres in length.⁴⁴ These designs were typically rendered on multiple pieces of parchment assembled into scrolls, a format ideally suited for the depiction of vertiginous towers, belfries, and sacrament tabernacles.⁴⁵ In the case of twin-towered Gothic facades, this procedure was simply duplicated. The draftsman of a huge drawing for Cologne Cathedral, made some time after 1290, joined two largely symmetrical drawings, executed on separate rolls, to produce a single elevation made of eleven large pieces of parchment.⁴⁶

Fig. 3.12
Apodyterium,
caldarium, and
frigidarium of the
Baths of Diocletian
(1519). Pen and
ink on paper, 21 x
56.6 cm. Vienna,
Albertina, AZ Egger
15v–16r. Photo: ©
Michael J. Waters.

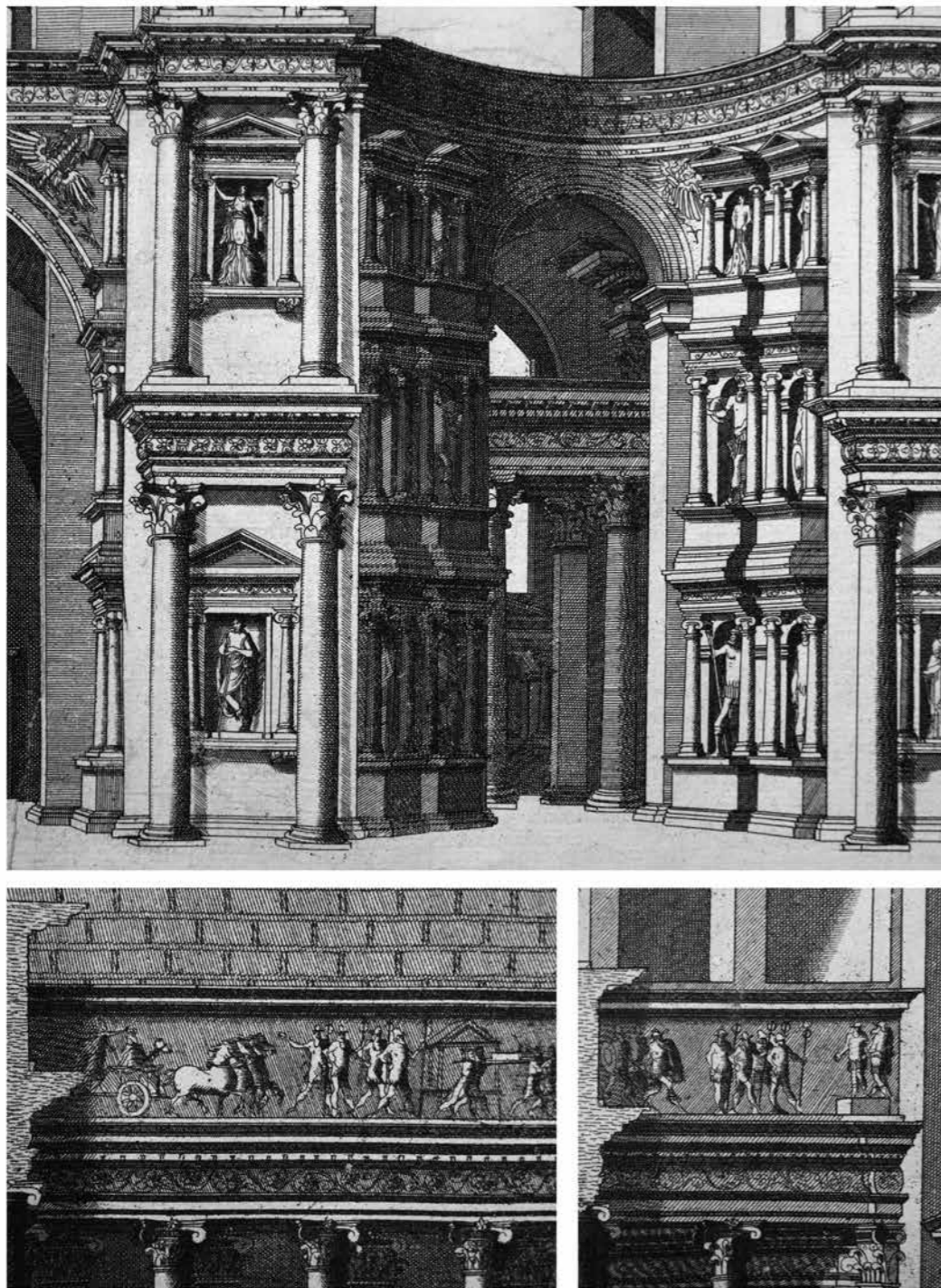


Already in the late fifteenth century, Northern engravers such as Alart Duhomeel, Wenzel von Olmütz, and Master W with the Housemark, began to create large prints in the tradition of these drawings. Depicting Gothic towers, tabernacles, baldachins, and micro-architectural monstrances, these engravings, which perhaps served as workshop models, were often printed with multiple plates on multiple pieces of paper (fig. 3.17).⁴⁷ Printmakers in Italy, on the other hand, rarely produced similar multi-sheet architectural prints.⁴⁸ This is despite the fact that Italian architects, like their Northern counterparts, continued to create enormous presentation drawings throughout the Renaissance.

Beyond the realm of books, the production of discrete composite woodcuts and engravings of other subjects was in fact quite common in the Renaissance. Individual engravings and etchings were limited by the size of copperplates, width of rolling presses, and dimensions of available paper.⁴⁹ While single-sheet woodcuts could be larger, even the most extraordinary examples, such those of Jacopo de' Barbari's enormous view of Venice (1500), rarely surpass a metre in length or width.⁵⁰ Printmakers transcended these technical constraints through a process of assembly, creating works of immense size from multiple printed sheets typically affixed to cloth.⁵¹ The largest of these, the *Triumphal Arch of Emperor Maximilian* (1515–17), consists of 195 blocks printed on thirty-six pieces of paper, which measure, when all combined, approximately three and a half by three metres.⁵² Works of this scale were intended to be mounted on walls and became part of the architectural environment. Some, such as Dürer's contemporary four-piece *Great Column* woodcut (1517), were even designed as a form of wallpaper, which could be painted and gilded (fig. 3.18).⁵³ Rising to over one and half metres in height and rendered in perspective, this elaborate full-scale fictive column, supported by two putti and decorated with ram's heads, winged female creatures, and a garland holding satyr, transformed print into an architectonic medium, albeit an exceedingly ephemeral one.⁵⁴

Prints also were easily assembled into horizontal scrolls of seemingly unlimited length. In 1576, for example, Girolamo Muziano published a series of 130 etchings of the Column of Trajan, which when combined form a continuous fifty-six-metre-long frieze that could be bound and folded, rolled up, or even—according to the original copyright application—pasted onto a wooden model of the monument.⁵⁵ Biblical, ancient, and contemporary processions and triumphs were

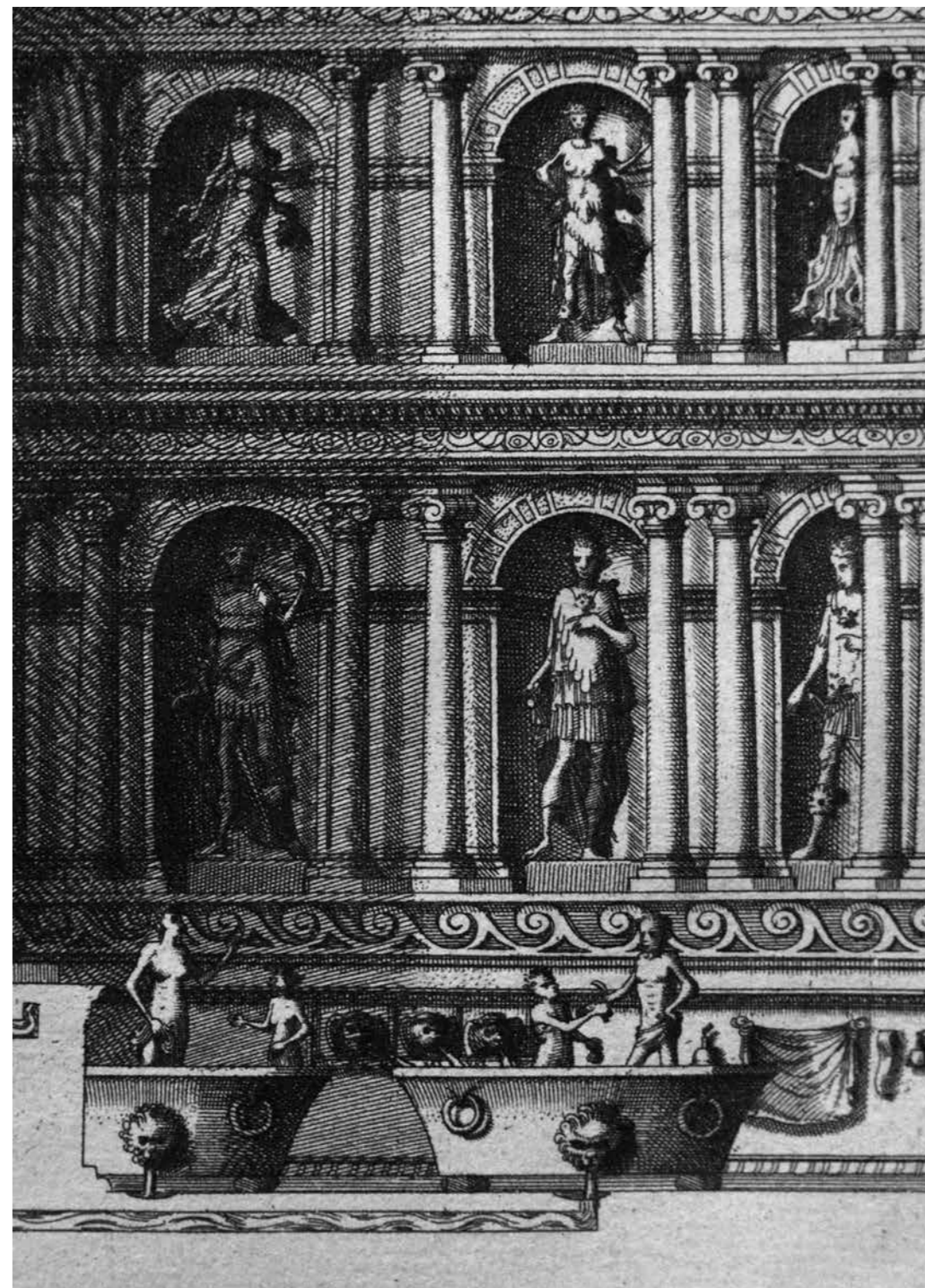
Fig. 3.13
Detail of fig. 3.4
(top); Details of fig.
3.5 (bottom).



ideally suited for this format.⁵⁶ Already beginning in 1512, the Holy Roman Emperor Maximilian sought to promote his claim to authority by sponsoring the production of a spectacular fifty-four-metre *Triumphal Procession*.⁵⁷ Robert Péril and Nicolas Hogenberg commemorated the 1530 Bologna coronation of Emperor Charles V in a set of similar processional woodcuts and etchings, and Jörg Breu the Elder even memorialised the emperor's return to Augsburg the same year in a multipart woodcut frieze.

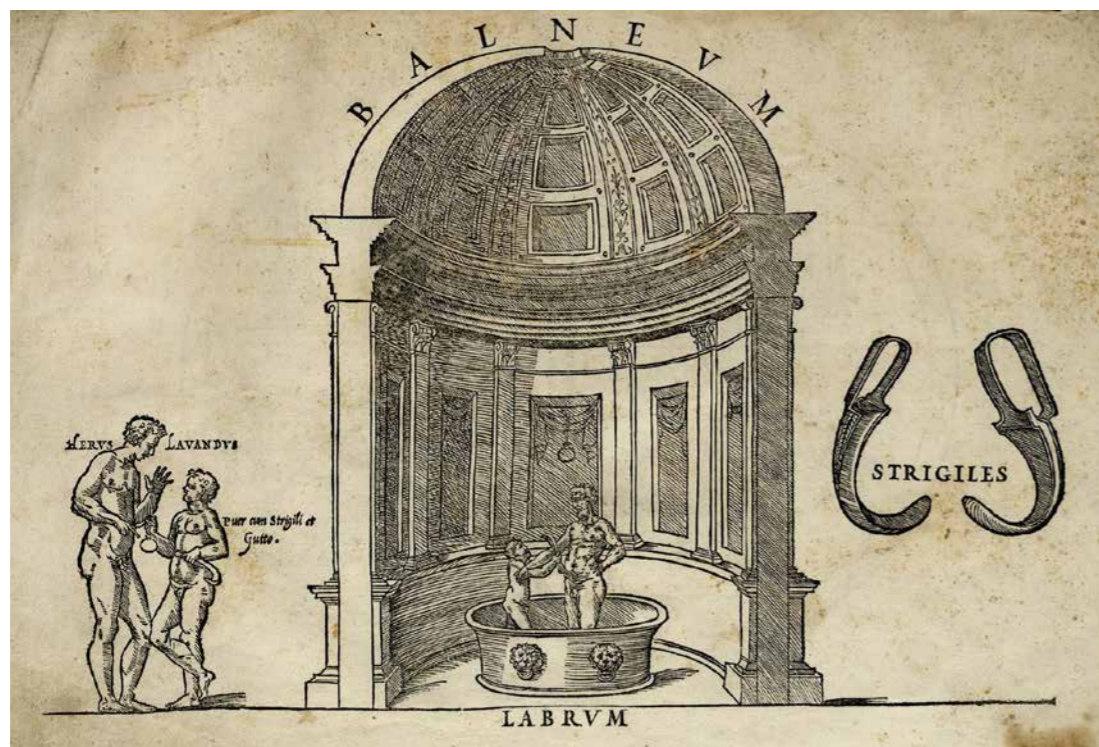
These prints, despite their lack of architecture, provided a clear template for the *Baths of Emperor Diocletian*, one with strong imperial connotations. In fact, the closest analogue to these etchings is a monumental print of the Brussels funeral procession of Charles V (fig. 3.19).⁵⁸ Published by Hieronymus Cock with the assistance of Christophe Plantin in 1559, and executed by the Van Doetecum brothers, it is composed of thirty-four etched plates as well as letterpress

Fig. 3.14
Detail of fig. 3.4.



text issued in six languages. The prints, which extend in total to some eleven and a half metres, depict dignitaries and courtiers solemnly parading towards an elaborate catafalque. These figures are labelled in Italic script and above them is a large Latin epigram rendered in classicising Roman letters, just like in the etchings of the Baths of Diocletian.⁵⁹ These commonalities of format and style suggest not only a common artistic origin, but also a shared tradition of representation tied to regal displays of power. Processions were a fundamental means by which rulers demonstrated sovereignty and physically enacted their authority. Panning these prints, the viewer follows the movement of the retinue, virtually enacting the process of procession. This visual locomotion thus activates these images and actualises imperial ritual, much like similar contemporary painting,

Fig. 3.15
 Tolomeo Egnazio
 da Fossombrone,
Balneum, from
 Marco Fabio
 Calvo, *Antiquae
 urbis Romae
 cum regionibus
 simulachrum*
 (Rome: Valerio
 Dorico, 1532),
 p. F ii. Woodcut.
 Rome, Deutsches
 Archäologisches
 Institut, K 91
 kl.Fol Rara. Photo:
 © Deutsches
 Archäologisches
 Institut.



fresco, and tapestry cycles, as well as architectural friezes, such as the 150-metre-long Roman triumph executed in sgraffito on the Dresden Stallhof and Langer Gang (1586–1588).

The diascopic prints of the *Baths of Emperor Diocletian* engaged these established viewing practices and harnessed the associative meanings embedded in their horizontality. They were part of a network of prints that projected, through the act of scrolling, a triumphal image of imperium. As architectural representations, however, they differ fundamentally from contemporary processional prints due to their lack of narrative. Without a beginning or end, these etchings of the Baths of Diocletian have no clearly defined sequence. This absence of explicit directionality is compounded by their discontinuity. Rather than looking across a single, continuous, sweeping view of the structure, the publication instead provides as series of sequential cuts across the same structure. The viewer does not progress from start to finish, but rather gradually explores each image transversely. The etchings, in this way, look to other parallel traditions, such as panoramic maps.

Artists throughout the Renaissance created large composite topographic prints. Some of these depict contemporary events, most notably battles and sieges, but many others take the form of urban maps.⁶⁰ Already in the late-fifteenth century, the engraver Francesco Rosselli produced a series of bird's-eye views of Florence, Pisa, Rome, and Constantinople, the largest of which consisted of twelve sheets and measured over a metre and a half in length.⁶¹ Building on a tradition of painted cityscapes and a practice of measured surveying, these and similar later maps, such as Barbari's *Venice*, created all-encompassing views rendered from an aerial perspective.⁶²

An alternative approach also developed in the 1480s. Rather than depicting cities from above, these images, such as Erhard Reuwich's woodcut of Venice (fig. 3.20), present a horizontal panorama. Published along with other smaller city views as part of Bernhard von Breydenbach's *Peregrinatio in terram sanctam* (1486), this long woodcut does not project a single cohesive urban image, one legible from afar. The city, bustling with human activity, instead unfolds gradually as if the viewer, standing atop the mast of a tall ship, sails across the Venetian lagoon. While Reuwich may have relied in part on Italian precedent, it was in Northern Europe that this mode of representation become pervasive.⁶³ A view of Antwerp dated 1515, for example, depicts the city expanding across the Scheldt, and in 1531, Peter Quentell published a similar nine-block woodcut by Anton Woensam of Cologne spreading out along the banks of the Rhine.⁶⁴ Numerous other examples followed, all of which depict jagged cityscapes, dotted with pointy Gothic towers, set

against exceedingly flat terrain.⁶⁵ Rather than gazing deeply into urban space, each city becomes a flattened profile seen from a low vantage point. These sweeping horizontal views, as Lucia Nuti has observed, were deeply rooted in a culture of seafaring, one that relied on knowledge of coastlines for purposes of navigation. Sailing from the shore, cities and geographical features alike are reduced to their most basic profiles, overtaken by the all-encompassing marine horizon. Artists even illustrated schematic topographic silhouettes in navigational manuals, known as rutters, such as the guide to Baltic Sea routes first published in 1544 by painter and mapmaker Cornelis Anthonisz (fig. 2.21).⁶⁶ In the Low Countries especially, artistic and cartographic activities were integrally linked in the sixteenth century. Along with the omnipresent flatness of land and sea, they helped form a

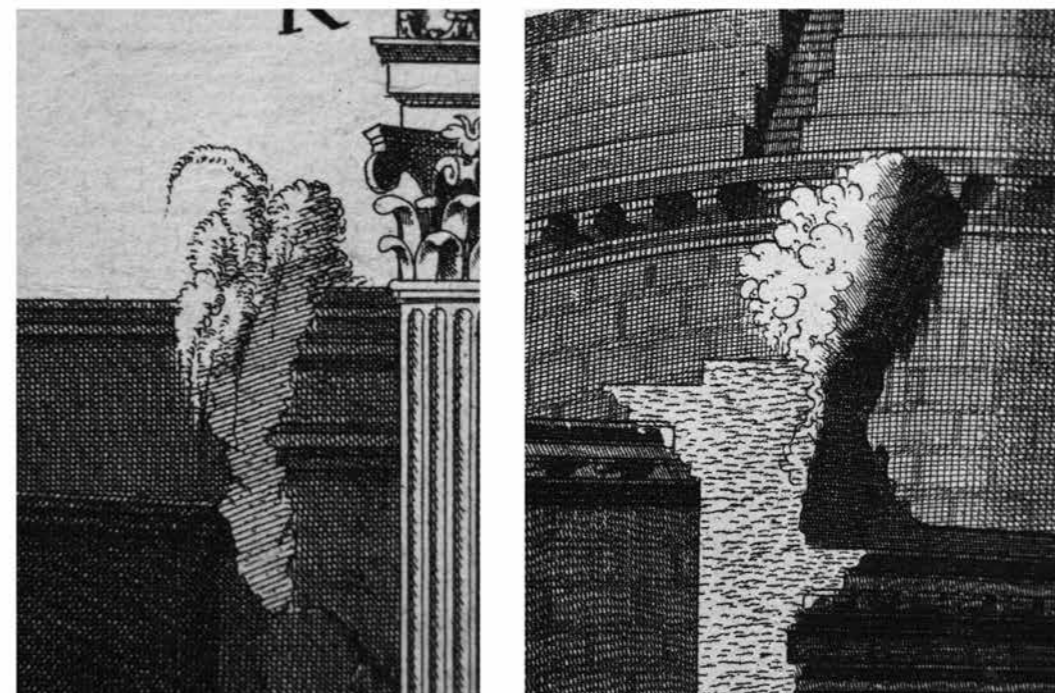
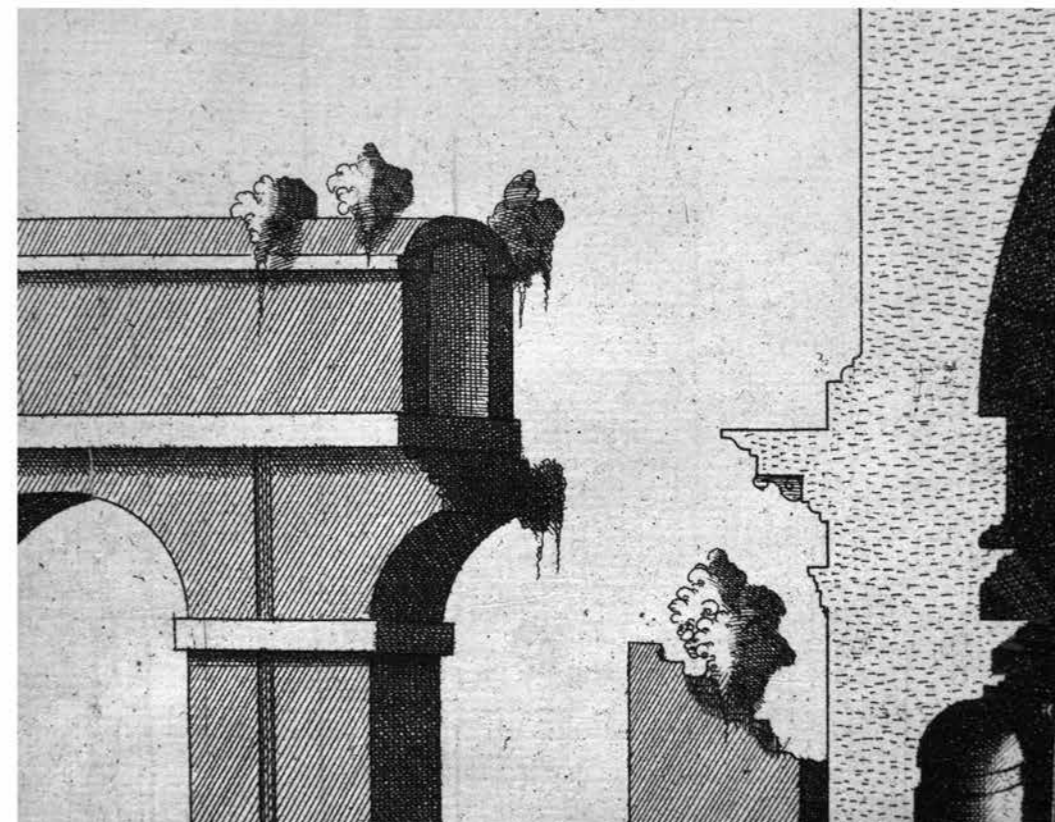


Fig. 3.16
 Details of figs 3.4
 and 3.6.

Fig. 3.17
Wenzel von Olmütz, *Gothic tabernacle with ground plan* (c.1475–1500). Engraving, 80.5 x 15.1 cm. Dresden, Staatliche Kunstsammlungen, from Max Lehrs, *Geschichte und kritischer katalog des deutschen, niederländischen und französischen Kupferstichs im XV. Jahrhundert* (Vienna: Gesellschaft für vervielfältigende Kunst, 1908). Photo: © Universitätsbibliothek Heidelberg.



distinctive Netherlandish visual culture, one that viewed the world in profile and panoramic vista.⁶⁷

Artists from the Netherlands, such as Maarten van Heemskerck and Herman Posthumus, also brought this way of seeing to Rome, creating sweeping city views already in the 1530s.⁶⁸ Expanding onto multiple sheets of paper, these drawings attempted to encompass the whole of the urban landscape from a single elevated vantage point. In Posthumus's view from the Capitoline Hill (fig. 3.22), the two-dimensional projection stretches the visual field almost a full 360 degrees, spanning from the Ponte Santa Maria (now the Ponte Rotto) on the left, to the Arch of Janus Quadrifons on the right. These types of topographic views, for which the Netherlandish artist Anton van den Wyngaerde would become internationally known in the 1560s, also shaped the depiction of architecture.⁶⁹ Herman Posthumus, when recording the Baths of Diocletian, for example, stood at the eastern corner of the complex and began to draw what remained of the central block. But rather than stopping there, he continued to pan the structure, turning the sheet of paper over to record the outer perimeter wall (fig. 3.23). Like contemporary printed and drawn city views, the artist broadens the cone of vision in order to capture the ancient structure in its entirety from a single viewpoint.

The images of Sebastiaan van Noyen for the *Baths of Emperor Diocletian* are grounded in these traditions. Their elongated horizontal format, like contemporary panoramic city views, splays the architecture along an unending horizon, pushing their views beyond the limits of peripheral vision. The longest etchings are in fact so wide that there is no single, universal vanishing point. The external focal point from which the viewer could take in the entire image, moreover, is too far away to perceive perspectival accuracy. Geometrical construction instead gives way to pictorial description. These prints thus do not function like traditional images constructed with one-point perspective. They do not project an internal spatial unity, comprehensible from a single, fixed viewpoint, nor do they immobilise the eye of the viewer in space. Rather, just as in the panoramic cityscapes, the shallow, outspread perspective promotes horizontal movement across the diasopic image, thereby engaging an embodied gaze that operates in real space.

The *Baths of Emperor Diocletian* etchings also condensed other interlinked architectural and cartographic activities, most notably the spatial practices of surveying that had developed in the Renaissance. Using instruments of navigation, such as the magnetic compass and cross-staff, as well as geometrical systems of triangulation, draftsmen in the sixteenth century created topographic maps and highly detailed architectural surveys.⁷⁰ For a

military architect such as Van Noyen, these activities would have been common practice. The design and construction of fortifications typically began with precise topographical surveying. Urban cartography, in fact, was often the result of defensive works.⁷¹ Modern warfare also instrumentalised surveying for the purposes of tactical preparation and cannon bombardment.⁷² It may very well have been because of his measuring and surveying skills that Granvelle sent the young architect to document the remains of ancient Rome.

The representation of space was also integral to the creation of a diasopic mode of visualisation. As discussed, the etchings of the baths were part of a tradition of architectural rendering stretching back to the fifteenth century that combined section and perspective. The ancient author Vitruvius, in fact, had described a form of perspective (*scaenographia*) in his brief discussion of methods of architectural representation. Placed alongside plan (*ichnographia*) and elevation (*orthographia*), *scaenographia* consisted of 'the shaded rendering of the front and receding sides, which converge to a point'.⁷³ Since Vitruvius did not discuss sectional projection, some sixteenth-century writers recast *scaenographia* as *sciographia*, meaning rendered with shadows. Daniele Barbaro in his 1556 Italian edition of Vitruvius, argued that *sciographia*, specifically here the creation of shaded profiles, enabled 'the architect, like the anatomist', to understand 'all exterior and interior parts' and the spatial relationship of 'every member'.⁷⁴ While Barbaro sought to promote orthogonal section over perspective in architectural practice, the lexical ambiguity between *scaenographia* and *sciographia* supported the continual conflation of these two modes of representation throughout the Renaissance.

In the case of the *Baths of Emperor Diocletian*, Van Noyen cut the building with seemingly surgical precision along the median plane from front to back (fig. 3.6) and twice transversely (figs 3.4 and 3.5). Once divided, the resulting sections were then given spatial depth through shading and perspective. These visual effects transform the analytical into the experiential, simulating the unfolding of architectural space as the viewer's gaze is slowly pulled inward. Bernardino Amico, who published similar sectional perspectives populated with small-scale figures (fig. 3.24) in his treatise on the Holy Land, first printed in 1610, believed this combination of representational techniques amplified the power of flat images since 'things united have greater force'. He also urged the viewers of his perspectival engravings to look at them with one eye closed from different angles. This, he argued, would make the buildings materialise from the page, actualising these distant sacred sites and enabling virtual pilgrimage.⁷⁵

Fig. 3.18
Albrecht Dürer, *Great Column* (1517), Woodcut, 164.5 x 26 cm. Melbourne, National Gallery of Victoria, 3597.a-d-4. Photo: © National Gallery of Victoria.



Fig. 3.19
Joannes and Lucas van Doetecum,
Funeral procession of Charles V
in Brussels (detail), from
*La magnifique et sumptueuse
pompe funèbre...*
(Antwerp:
Hieronymus Cock
and Christopher
Plantin, 1559),
pl. 7–20. Hand
coloured etching,
approx. 32 x
575 cm. Paris,
Bibliothèque
nationale de
France, Res Oc
1661. Photo:
© Bibliothèque
nationale de
France.

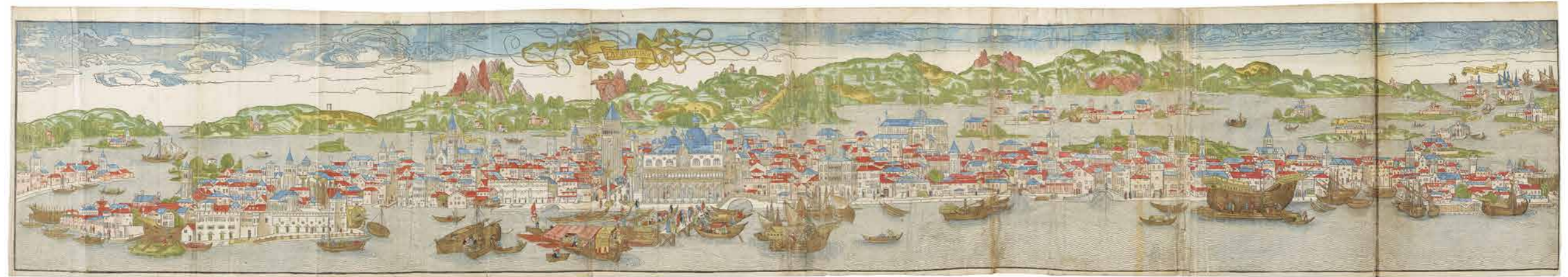


Fig. 3.20
Erhard Reuwich,
Venice, from Bernhard
von Breydenbach,
*Peregrinatio in terram
sanctam* (Mainz: Peter
Schöffer the Elder:
1486), pp. 13v–14r.
Woodcut, 30 x 160
cm. Oxford, Bodleian
Library, Arch. B c.25.
Photo: © Bodleian
Libraries, University of
Oxford.

These representations also recall the three-dimensional wooden models of holy monuments that Amico and others produced for the faithful. Like the engravings, the small objects permitted the viewer to understand the structure from multiple angles, and walls could even be removed to reveal interior views. Such physical models were a common feature of Renaissance architectural culture. They aided architects in the process of design and patrons in the act of adjudication. Like the diasopic prints of the *Baths*, they enabled viewers to scrutinise a building's architectural form and envision its spatial qualities. Some models, such as one built of brick in 1367 for the construction of Florence Cathedral, were even large enough to simulate the physical experience of an architectural interior. Antonio di Vincenzo's one-twelfth scale brick and plaster model of San Petronio in Bologna, made in 1390, was itself almost the size of a small building, measuring over fifteen by eleven metres.⁷⁶ Some wooden models also approached monumental dimensions: most famously, Antonio Labacco directed from 1539 to 1546, the creation of a gigantic model of new St Peter's in Rome (measuring 7.36 x 6.02 x 4.68 m), after designs by Antonio da Sangallo the Younger.⁷⁷ Executed at 1:30 scale, the model replicated the entire structure including its decorative scheme. It even simulated building materials with paint and approximated natural lighting effects, much to its detriment according to Michelangelo.⁷⁸ This large model could also be split in half, producing an effect akin to the diasopic views of van Noyen but in three dimensions. Like scrolling the prints in real space, the wooden model enabled the viewer, as they physically moved across the interior, to see through the structure, gaining a deeper understanding of the building with each successive step.

Drawings and prints could only ever approximate the spatial and experiential effects of a model. Sectional perspectival views nevertheless came close. Large examples, such as a parchment drawing by Juan Guas for the *capilla mayor* of San Juan de los Reyes in Toledo (c.1485–90), measuring almost two metres in height and perhaps created for Queen Isabella I of Castile, gave the viewer the impression of entering into a miniaturised fictive space. In this case, the effect was heightened by the low perspective, detailed sculptural program, and carefully delineated

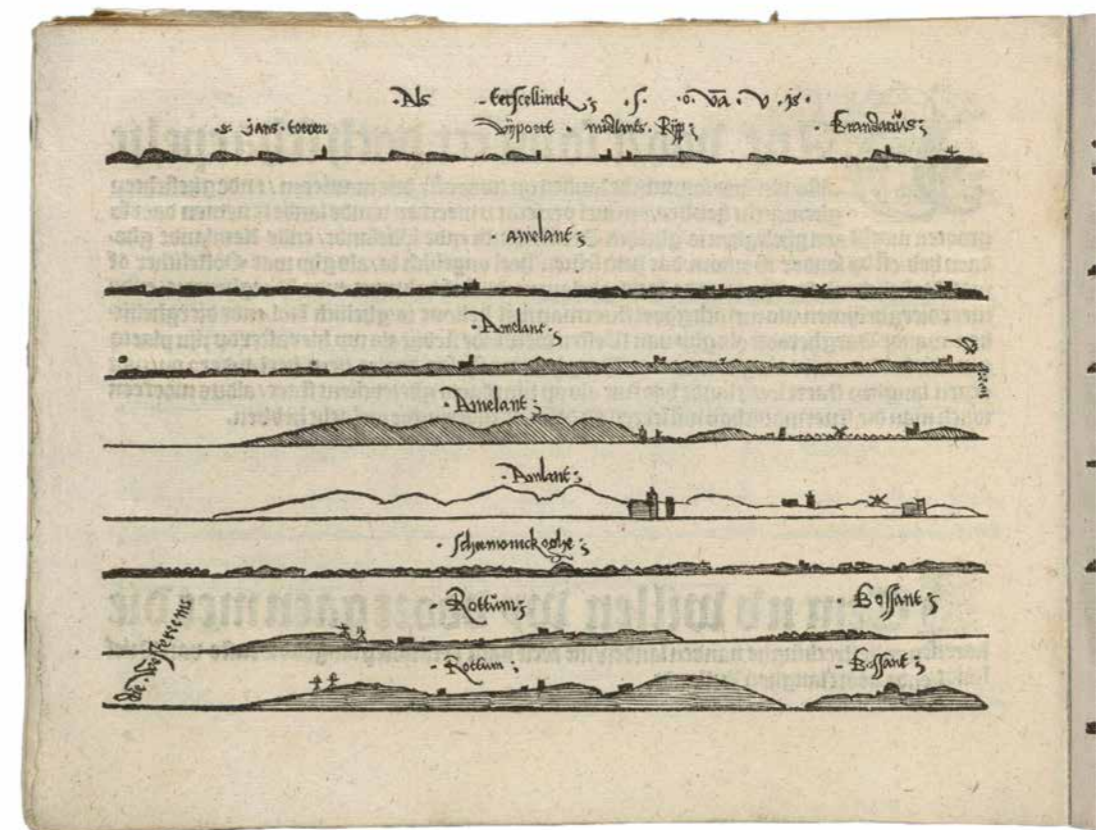


Fig. 3.21
Cornelis Anthonisz.,
*Onderwijsinge
vander zee*, 3rd ed.
(Amsterdam: Jan
Ewoutsz, 1558), p.
F 3v. Woodcut, 16 x
21 cm. Cambridge,
Harvard University,
Houghton Library,
NCS An866 544oc.
Photo: © Houghton
Library, Harvard
University.

Fig. 3.22
Herman Posthumus
(attr.), *View of Rome
from the Capitoline Hill*
(c.1536). Pen and ink
on paper, 17.4 x 103.6
cm. Berlin, Staatliche
Museen zu Berlin,
Kupferstichkabinett,
79 D 2 a, fol. 91v–92r.
Photo: © bpk /
Kupferstichkabinett,
SMB / Volker-H.
Schneider.



stonework.⁷⁹ Baldassare Peruzzi, in an even larger drawing for San Petronio in Bologna (1522–23), elaborated on these representational techniques.⁸⁰ Depicting his proposed addition to the basilica, this perspectival rendering selectively cuts away exterior walls and interior piers—at different points both vertically and horizontally—to reveal a massive, classicising, domed crossing and attached sacristy. Opened up for the viewer, the colossal interior space evokes the vaulted halls of Imperial Roman architecture that the architect had closely studied.

The vast scale of Peruzzi's proposed structure, like the etchings in the *Baths of Emperor Diocletian*, is further emphasised by groups of diminutive figures seen from above. These human elements make the drawing more than just a graphic substitute for a physical model. They create the impression of an actualised building, just like Amico's Holy Sepulchre or Van Noyen's Baths. This is also true of Giovanni Caroto's 1540 reconstruction of the Roman theatre of Verona (fig. 3.25). In this large, fold-out woodcut, the masonry of the imagined structure is peeled away to reveal the ancient monument. At the bottom, water gushing from drain spouts and a small man rowing a boat enliven the image.⁸¹ These examples attempt not just to expose structures through pictorial techniques, but to make them come alive through the insertion of human figures. They share, in this way, a deeper connection with the prints of the *Baths*. They also recall the densely populated urban views discussed earlier, some of which even claim to be *ad vivium*, meaning not just accurately taken 'from life', but made 'lifelike'.⁸² All of these cases, as well as the processional prints examined earlier, sought to give the impression of lifelike reality, even while expanding the realm of the visible.

It was from this rich, interconnected network of graphic material that a diascopic mode of representation emerged. The product of contemporary print culture, cartographic activities, and architectural practice, as well as traditions of representation that developed north and south of the Alps, Cock's prodigious publication pioneered a new manner of visualising architecture. It was a method of illustration that emphasised architectural corporality and propelled the embodied gaze of the viewer. Since it could only exist at a large scale, this diascopic method would never become commonplace, especially in the realm of print. The *Baths of Emperor Diocletian* etchings were by their nature exceptional.



The Life of the Baths of Emperor Diocletian

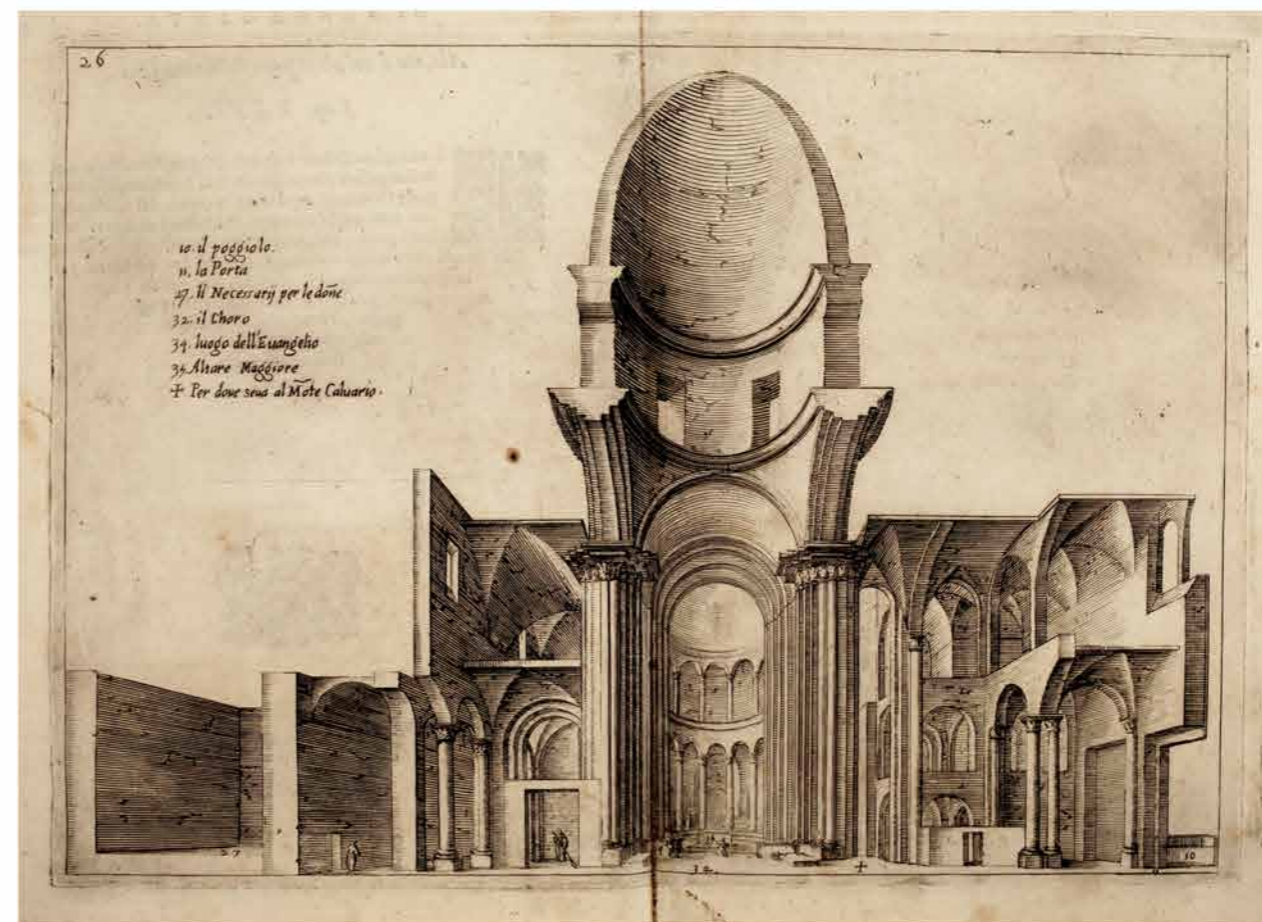
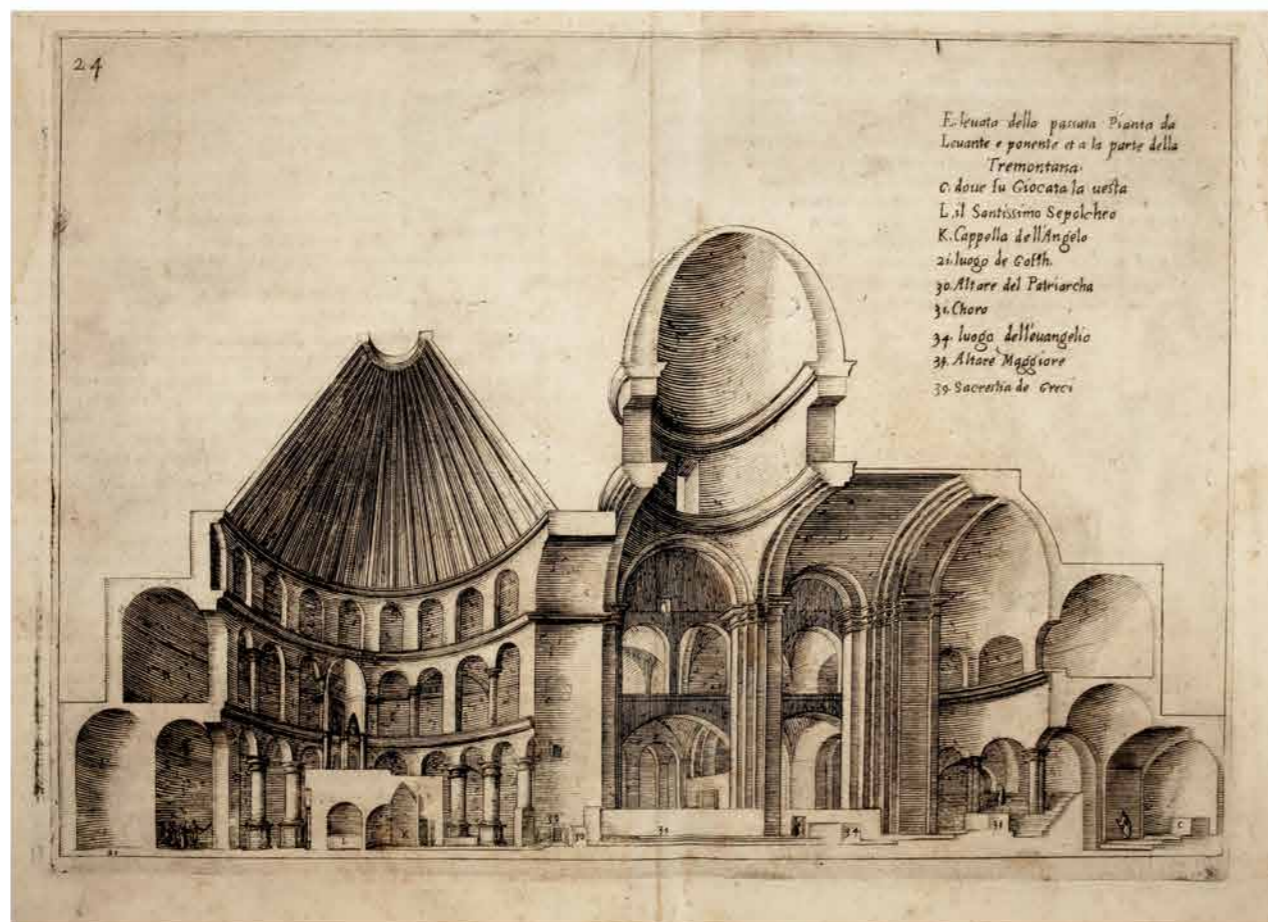
It is unknown how many copies Hieronymus Cock produced of the Baths of Emperor Diocletian, which like many contemporary printed works was protected by a royal privilege. Two states exist: one with and one without the publisher's address at the bottom of the etchings.⁸³ Volcxken Diericx, Cock's partner and wife, appears to have continued to use the plates after the printer's death in 1570, but by this point in time they were heavily oxidised.⁸⁴ When the contents of the *Quatre Vents* press were eventually sold in 1601, the battered copper plates were dispersed and at least one of them became support for a painting.⁸⁵

Unlike Cock's *Large Book of Ruins*, which Jacques Androuet du Cerceau, Battista Pittoni, and Vincenzo Scamozzi almost immediately plagiarised, only Sebastiaan van Noyen's plan was copied by another engraver.⁸⁶ Other prints of the bath complex, nevertheless, began to circulate



Fig. 3.23
Herman Posthumus
(attr.), *Baths of
Diocletian* (c.1536).
Pen and ink on
paper, 19.5 x 15
cm (each sheet).
Berlin, Staatliche
Museen zu Berlin,
Kupferstichkabinett,
79 D 2 a, fol.
83 r-, 83v, 81r.
Photo: © bpk /
Kupferstichkabinett,
SMB / Volker-H.
Schneider.

Fig. 3.24
Jacques Callot after
Bernardino Amico,
*Church of the Holy
Sepulchre*, from
*Trattato delle piante
& immaginj de
sacri edifizj di Terra
Santa...* (Florence:
Pietro Ceconcelli,
1620), pl. 24 and
26. Etching and
engraving, 25.6 x
37.5 cm (each sheet).
Williamstown,
Sterling and Francine
Clark Art Institute
Library, NA1477.2
A55. Photo: ©
Sterling and Francine
Clark Art Institute
Library.



in the sixteenth century. In fact, in the same year that the *Baths of Emperor Diocletian* appeared, Michele Tramezzino issued a print of the very same building (fig. 3.26).⁸⁷ Engraved by the Netherlandish artist Jacob Bos after drawings by architect and antiquarian Pirro Ligorio, the print depicts an aerial perspective of the complex with its component parts labelled. The viewer therefore looks upon the reconstructed ancient structure from above, easily comprehending its complicated form in a single schematic image rather than experiencing its diverse spaces through horizontal interior views. Only Vincenzo Scamozzi sought to merge these two approaches (fig. 3.27). Entitled *Chorographia omnium partium thermarum diocletiani* ('Chorography of all parts of the Baths of Diocletian') and engraved by Mario Cataro in 1580, it consists of a birds-eye perspective cut away to reveal a transverse section and a plan seemingly measured with cartographic accuracy.⁸⁸ As Scamozzi notes, he combined architectural and optical ways of seeing so the viewer could better visualise the structure's overall design by synthesising the traditional Vitruvian methods of representation: *ichnographia*, *orthographia* and *scaenographia*.⁸⁹ In this way, he fused Sebastian van Noyen's plan and diascopic views (figs 3.1 and 3.6) to create a single chorographic image that could encapsulate the whole of the structure.⁹⁰

Compared to these Italian engravings, the *Baths of Emperor Diocletian* was also significantly more expensive. It also cost at least twice as much as contemporary Dutch illustrated books and sets of prints, which typically sold for a florin or less.⁹¹ By the end of the century, perhaps due to the publication's scarcity, the Paduan doctor and bibliophile Gian Vincenzo Pinelli eagerly paid three and a half florins for a set from the cartographer and book trader Abraham Ortelius.⁹² In addition to Pinelli's library, which contained around ten-thousand volumes, the *Baths* found its way into the collections of other learned intellectuals such as Joannes Rodenborch, a professor from the University of Wittenberg, and numerous illustrious princely *kunstammern*, including those of Ferdinand, Archduke of Tyrol; Augustus, Elector of Saxony; Adolf, Count of Tecklenburg; and Albert V, Duke of Bavaria.⁹³ In Albert's famous Munich collection, the duke

placed the prints, mounted on cloth, alongside numerous architectural books, drawings, prints, and maps, and right next to other *mirabilia* including coral sculptures, animal skulls, and even illustrations of conjoined twins, all of which sought to impart a sense of wonder to the viewer.⁹⁴

Whether these prints also served as architectural models for new construction is a matter of conjecture, but artists and architects certainly copied and collected them.⁹⁵ A seventeenth-century draftsman, for example, redrew several of the architectural elements onto a sheet of paper now in the Nationalmuseum in Stockholm, and later, another created several finely rendered copies, which came to be collected by Baron Philipp von Stosch in the mid-eighteenth century.⁹⁶ Giovanni Antonio Rusconi, the mid-sixteenth century Venetian architect and illustrator of Vitruvius, owned some of the prints, as did Sir Christopher Wren and Nicodemus Tessin the

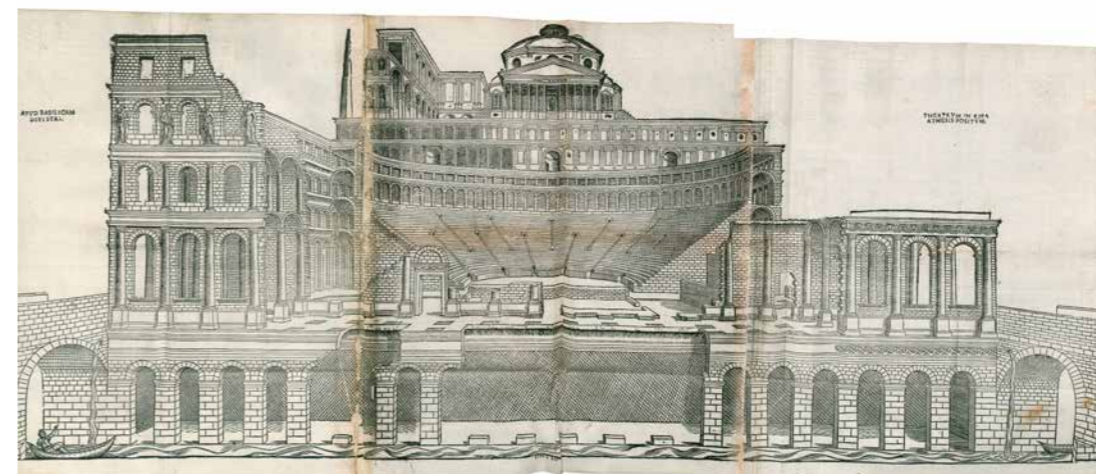
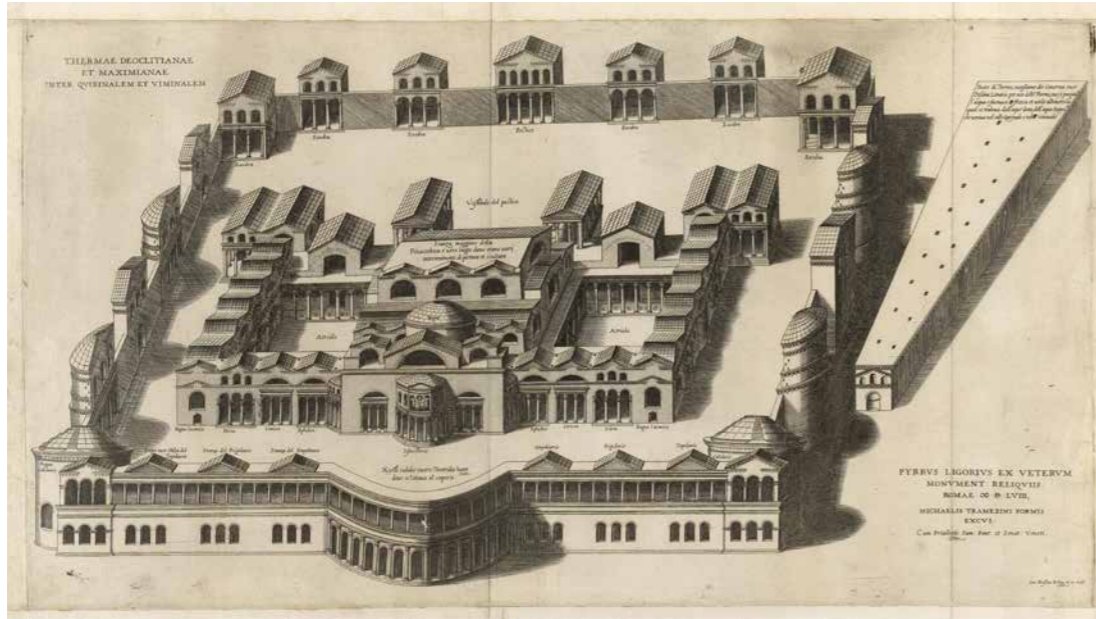


Fig. 3.25
Giovanni Caroto,
*Reconstruction of the
Roman Theatre of
Verona*, from *Torello
Saraina, De origine et
amplitudine civitatis
Veronae* (Verona:
Antonio Puttelto,
1540), unnumbered
plate. Woodcut, 33 x
90.5. Zurich, ETH-
Bibliothek, Rar 9230
q. Photo: © ETH-
Bibliothek Zürich.

Fig. 3.26
Jacob Bos, after
Pirro Ligorio,
Baths of Diocletian
(1558). Engraving,
39.2 x 69.3 cm.
Madrid, Biblioteca
Nacional de España,
INVENT/75378.
Photo: © Biblioteca
Nacional de España.



Younger over a century later, and perhaps even Giorgio Vasari.⁹⁷ A posthumous 1597 inventory of Juan de Herrera's collection also records a copy bound with other designs for buildings.⁹⁸ It may have indeed been these prints that inspired the Spanish architect to enlist Pedro Perret in 1589 to produce engravings of his vast monastic complex at El Escorial, including four transverse sections and elevations keyed to a pair of plans.⁹⁹ Rather than gazing backwards to the past, these prints project to an increasingly global audience a forward-looking image of the recently completed construction that few had seen with their own eyes.

Herrera's prints subsequently served as a model for the images of the Temple of Solomon that his student, the Jesuit priest Juan Bautista Villalpando, produced for the second volume of his monumental *Ezechielem Explanaciones* (1604).¹⁰⁰ These visionary, scroll-like images (fig. 3.28) not only provided compelling divine precedent for El Escorial, but also, according to Villalpando, reconstituted the very architectural images that had been drawn by the hand of God in plan, elevation and perspective, given to Solomon, executed by builders, and described in the prophecies of Ezekiel.¹⁰¹ The foldout engravings, therefore, enabled viewers to see like God in sections, which Villalpando described in optical terms as being 'cut through the cone of vision'. Like the reconstructed views in the *Baths of Emperor Diocletian*, the engravings of the

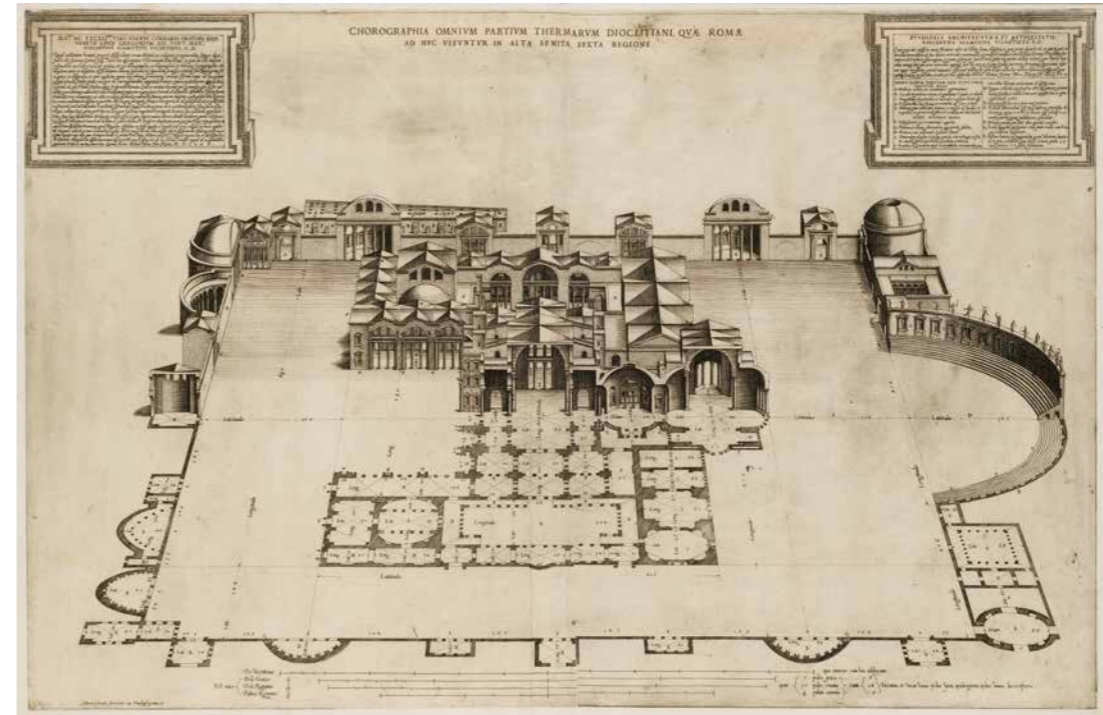


Fig. 3.27
Mario Cartaro, after
Vincenzo Scamozzi,
Baths of Diocletian
(1580). Engraving,
45.8 x 70.6 cm.
Los Angeles, Getty
Research Institute,
870672. Photo:
© Getty Research
Institute, Los
Angeles.



Fig. 3.28
Juan Bautista
Villalpando, *Lateral
section of the
Temple of Solomon*,
from Juan Bautista
Villalpando and
Jerónimo de Prado,
*In Ezechielem
explanaciones* (Rome:
Luigi Zanetti,
Carlo Vullietti, and
Alfonso Chacón,
1596–1604), vol. 2,
unnumbered plate.
Engraving, 39.4 x
139.1 cm. Zurich,
ETH-Bibliothek,
861. Photo: © ETH-
Bibliothek Zürich.



Fig. 3.29
Florimond
Boullanger, *Baths of
Diocletian* (1842).
Chinese ink and
watercolour on
cloth paper, 62 x
307 cm. Paris, École
Nationale Supérieure
des Beaux-arts, env.
32-7. Photo: © Ecole
nationale supérieure
des beaux-arts,
Paris / Jean-Michel
Lapellerie.

Temple of Solomon revealed through graphic architectural conventions things that the eye cannot see. Print thereby had the power to provide superhuman ways of looking through buildings, making visible the lost architecture of the past, be it for architectural education, antiquarian erudition, or religious contemplation.

Cock's prints of the baths continued to be actively collected well into the eighteenth century, but as Johann Joachim Winkelmann lamented, they became increasingly scarce over time.¹⁰² The famous print dealer and collector Pierre-Jean Mariette, in fact, wrote on his copy, now in the Institut de France: 'few books are as rare as this one. I do not hesitate to add that there are few so curious and so interesting.'¹⁰³ Mariette so valued this work that he had a specially engraved title page made for it. While Palladio's drawings of the baths became available in the 1730s through a deluxe printed facsimile sponsored by their owner, Richard Boyle, third Earl of Burlington, nothing until the next century came close to approaching the overwhelming scale and effect of Cock's publication. It was in the nineteenth century that French architects, having won the Prix de Rome, created impressive reconstructions of a variety of ancient Roman complexes as *envois* to be sent back to Paris for official review.¹⁰⁴ Similar to the huge drawings for modern structures that they made at the École des Beaux-Arts, these renderings of antiquity—such as those of the Baths of Diocletian by Florimond Boulanger (1842) and Edmond Paulin (1880)—feature expansive elevations and sections, some stretching over three metres (fig. 3.29).¹⁰⁵ They were also accompanied by complimentary documentary illustrations of the still-standing, heavily ruined structure, which along with related plans make explicit the process of reconstruction that had only been obliquely implied in the earlier 1558 etchings. Yet despite this graphic display of archaeological objectivity, just like Sebastiaan van Noyen's reconstructions, these later renderings—all finely executed in coloured wash and complete with meticulously delineated wall decoration and sculpture—pull the viewer in with their detail and illusionistic depth; and then push them across to take in the enormity of the structure and the array of unfolding spaces. This horizontal panning impulse, along with the carefully constructed lighting effects and heightened atmospheric perspective, enlivens even the most rigidly symmetrical of examples.

The *Baths of Emperor Diocletian*—the longest architectural publication produced in early modern Europe, and the only one that was ever mounted on cloth and rolled up as a scroll—represents an important milestone in architectural print culture. Realised through the financial support of a wealthy patron, the technical skill of a prolific publisher, the artistic acumen of his innovative etchers, and the ingenuity of a young architect, this exceptional work—which addressed through text and image a diverse audience of artists, architects, intellectuals, collectors, and rulers—mobilised a new diasopic mode of representation and means of experiencing antiquity. In doing so, it built on over a half-century of antiquarian study, harnessed novel techniques of visualisation, and employed newly developed technologies of documentation. The *Baths of Emperor Diocletian* also exploited the potential of mechanical reproduction as a medium of preservation and agent of enlivenment, and in its artistic brilliance and technical virtuosity, conferred prestige upon printer and patron alike. While only about a dozen complete sets survive today, this extraordinary Netherlandish work of antiquarian erudition and graphic bravura remains a monumental testament to the power of print and its ability to reconstitute and reanimate the architecture of antiquity.

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Variety, Archeology, and Ornament: Renaissance Architectural Prints from Column to Cornice at the University of Virginia Art Museum.

- On these prints, see Timothy A. Riggs, *Hieronymus Cock: Printmaker and Publisher* (New York: Garland Publishing, 1977), pp. 353–54, no. 174; Henk Nalis, *The Van Doetecum Family: the New Hollstein Dutch and Flemish etchings, engravings and woodcuts 1450–1700*, 4 vols (Rotterdam: Sound & Vision Interactive, 1998), vol. 1, pp. 44–63, nos. 54–80; Krista de Jonge, 'Thermae Diocletiani', in Fernando Marias and Felipe Pereda (eds), *Carlos V: Las Armas y las Letras* (Granada: Sociedad Estatal para la Conmemoración de los Centenarios de Felipe II y Carlos V, 2000), pp. 473–475; Christopher Heuer, 'A Copperplate for Hieronymus Cock', *The Burlington Magazine* 149:1247 (2007): pp. 96–99; Peter Fuhring, 'Thermae Diocletiani', in Joris van Grieken (ed.), *Hieronymus Cock: The Renaissance in Print* (Brussels: Mercatorfonds, 2013), pp. 118–123; Emma de Jong, 'Thermae Diocletiani: Van Noyen's Ambitious Reconstruction of the Baths of Diocletian for Admirers of Architecture and the Antique' (MA diss., Warburg Institute, University of London, 2015).
- The actual Baths of Diocletian is oriented to intermediate directions, but turned forty-five degrees in the prints (south-west becomes west, etc.). The etchings are labeled 'interior side across the middle of the baths from south to north' (*latus interior per medias thermas, a meridie usque in septentrionem*), 'interior side view across the middle of the baths from east to west' (*prospectus interioris lateris, per medias thermas ab oriente usque ad occidentem*), 'exterior side view from north to south' (*prospectus exterioris lateris, a septentrione ad meridiem*), and 'view of the entrance towards the east' (*prospectus intrantibus orientem versus*). The western exterior elevation does not have an inscription.
- Stockholm, Kungliga Biblioteket, Stockholm, Gardie Stadsvyer 25 (only Hollstein 57–80); Stockholm, Kungliga Biblioteket, 105 B 4 b Fol. Roma, Diocletiani Termer (with five cut-out prints); Chatsworth, Duke of Devonshire Collection; Oxford, Bodleian Library, Radcl. a.1 (only Hollstein 54–56, 63–76); London, Royal Academy of Arts, inv. 12/13[24–29] (with five cut-out prints); London, Royal Institute of British Architects, inv. 2326 (only Hollstein A–B, 55, 63–80); London, British Library, Maps 7 Tab. 1, fols. 17, 19–23, 26–27 (only Hollstein A–B, 54, 57–66, 74–80); Paris, Bibliothèque de l'Arsenal, EST 1611, Atlas van Rome, nos. 87–96 (with five cut-out prints); Paris, Bibliothèque nationale de France, Département des imprimés, réserve, J-477 (bis); Paris, Bibliothèque nationale de France, Département des estampes et de la photographie, inv. Gc-36 (A)- fol.; Paris, Bibliothèque de l'Institut de France, Fol Z 140 Réserve Hors-rang; Besançon, Bibliothèque Municipale, inv. 11622 (missing two of the combined etchings); Leiden, Universiteit, inv. PK-P-122.013-039; Berlin, Staatsbibliothek zu Berlin, Libri impr. rari fol. 262; Weimar, Herzogin Anna Amalia Bibliothek, inv. Th R 1 : 13 (with five cut-out prints); Dresden, Kupferstichkabinett, inv. B 974.2; Vienna, Kunsthistorisches Museum, Kammer, inv. 6630 (with five cut-out prints); Vienna, Österreichische Nationalbibliothek, inv. 44.O.1; Rome, Archivio Storico Capitolino, inv. 17208; Vatican City, Biblioteca Apostolica Vaticana, Cicognara.XII.3886(49) (only Hollstein 74–76); Vatican City, Biblioteca Apostolica Vaticana, Stampe. Cartella.Miscellanea (only Hollstein 74–76).
- Copies conserved as scrolls include those at the Royal Academy of Arts, Bibliothèque nationale de France (Réserve, J-477 (bis)), and Staatsbibliothek zu Berlin. As Peter Fuhring notes, the Paris copy was originally bound, but in the eighteenth century, it was mounted on a single piece of linen and placed in a specially designed leather box, Fuhring, 'Thermae Diocletiani', p. 118.
- Edward Wouk, 'Antoine Perrenot de Granvelle, The Quatre Vents Press, and the Patronage of Prints in Early Modern Europe', *Simiolus* (2015): pp. 31–61.
- Krista de Jonge, 'Anticse Wercken: Architecture in the Antique Manner 1500–1530', in Krista De Jonge and Konrad Ottenheim (eds), *Unity and Discontinuity: Architectural Relations between the Southern and Northern Low Countries 1530–1700* (Turnhout: Brepols, 2007), p. 52.
- On his library, see Luciana Miotto, 'Les Traités d'Architecture de la Bibliothèque des Granvelles', in Jacqueline Brunet and Gennaro Toscano (eds), *Les Granvelles et l'Italie au XVIe Siècle: Le Mécénat d'une Famille* (Besançon: Cêtre, 1992), pp. 95–108.
- 'Sumptib. et ardentis erga venerandam Antiquitatem studio...in lucem eductae.'
- F. W. H. Hollstein, *Dutch and Flemish Etchings, Engravings, and Woodcuts, ca. 1450–1700*, 72 vols (Amsterdam: Menno Hertzberger, 1949–2010), vol. 4, pp. 180–183, nos. 22–46.
- On the sources of Cock's etchings and Netherlandish vedute of Rome, see Elise Zadek, 'Der Palatin in den Publikationen Hieronymus Cocks: Ruinen und ihre frühneuzeitliche Darstellung im Bild' (MA diss., Humboldt-Universität zu Berlin, 2005); Arthur DiFuria, 'Remembering the Eternal in 1553: Maerten van Heemskerck's Self-Portrait before the Colosseum', *Netherlands Yearbook for History of Art* 59 (2009): pp. 90–108.
- Rebecca Zorach, 'The Public Utility of Prints', in Rebecca Zorach (ed.), *The Virtual Tourist in Renaissance Rome: Printing and Collecting the Speculum Romanae magnificentiae* (Chicago: University of Chicago Library, 2008), pp. 63–83; Christopher Heuer, 'Hieronymus Cock's Aesthetic of Collapse', *Oxford Art Journal* 32:3 (2009): pp. 387–408.
- Already in the fourteenth century, Giovanni Boccaccio described the Baths of Diocletian as having been ruined by the avarice and negligence of Rome's own citizens. 'Le stufe di Diocleziano...per avarizia come per negligenza de' cittadini già divorate e péste, e quasi mutati i nomi e distrutti quanto alla gloria de' componitori'. Giovanni Boccaccio to Francesco Nelli, 1363, in Aldo Francesco Massera (ed.), *Opere Latine Minori* (Bari: Laterza, 1928), p. 166.
- Antonio Gallonio, *Vita beati p. Philippi Neri Florentini Congregatione Oratorio fondatoris* (Rome: Luigi Zannetti, 1600), p. 44. Around 1610, Luca Ciamberlano created an engraving of the event, which he dates 1538, as part of set of prints of the saint's life.
- The architect is commemorated in the publication with the epigram 'Huius eximiae descriptionis Autor Sebastianus à Noia, duorum summorum Principum, Caroli. V. Impe. & Philippi Regis Hisp. Angl. &c. per Belgicas, caeterasq; inferiores has eorum ditiones Architectus generalis, homo ea in re longè ingeniosiss. migravit ex huius vitae miseris, magna quidem eius artis, iactura, Landrisii, Die. III. Iunii. An. MDLVII. cum vixisset annos XXXIII, menses. III. dies. VI. Sepultus Bruxelle in Fano Dive Gudule'.
- On his military career, see most recently Pieter Marten, 'Militaire architectuur en vestingoorlog in de Nederlanden tijdens het regentschap van Maria van Hongarije (1531–1555), De ontwikkeling van de gebastioneerde vestingbouw' (PhD diss., Leuven University, 2009).
- Krista de Jonge, 'Le Palais Granvelle à Bruxelles: Premier Exemple de la Renaissance Romaine dans les Anciens Pays-Bas?', in Krista de Jonge and Gustaaf Janssens (eds), *Les Granvelles et les Anciens Pays-Bas* (Leuven: Universitaire Pers Leuven, 2000), pp. 341–388; De Jonge, 'Thermae Diocletiani', p. 474; Krista de Jonge, 'Hieronymus Cock's Antiquity', in *Hieronymus Cock*, p. 43.
- 'Antonius Perrenotus Atrebat. praesul eisdem ex insignibus quae Romae extant reliquiis a Sebastiano Oiano architecto dimetri deliniarique iussit' quàm exactiss. ad vivum à fundo usque descriptae'.
- See Peter Parshall, 'Imago Contrafacta: Images and Facts in the Northern Renaissance', *Art History* 16:4 (1993): pp. 554–579; Claudia Swan, 'Ad vivum, naer het leven, from the Life: Considerations on a Mode of Representation', *Word and Image* 11:4 (1995): pp. 353–372; Sachiko Kusukawa, 'Conrad Gessner on an "Ad Vivum" Image', in Pamela H. Smith, H. J. Cook, and Amy R. W. Meyers (eds), *Ways of Making and Knowing: The Material Culture of Empirical Knowledge* (Ann Arbor: The University of Michigan Press, 2014), pp. 330–356.
- Renaissance architects equated the ancient *palmus maior* with the contemporary *palmus* (22.3 cm) and the ancient *pes* with the contemporary *pede* (29.7 cm). Mark Wilson Jones, 'Palazzo Massimo and Baldassare Peruzzi's Approach to Architectural Design', *Architectural History* 31 (1988): pp. 64, 78, n. 49. The measurements in the publication are not consistent throughout. The introduction gives distances in *pedes*, which as Emma de Jong has observed corresponds to one and a third *palmi* on the plan. In the views, however, measurements given in *palmi* correspond equally to the scale in *pedes*. De Jong, 'Thermae Diocletiani', pp. 19–21.
- 'Vera mensura pedis. xii. digitorum quo Sebastianus ad Oya totu opus dimensus est'.
- The measurements given in Van Noyen's plan (110 *palmi*, 6 *digiti*) and the introductory text (84 *pedes*) of the lower portion of the now lost ancient cistern next to the baths, for example, are both roughly equivalent to those record in French feet by the anonymous Destailleur draftsman (72 *ped.*, 2 *onces*, 6 *lignes*), Berlin, Kunstbibliothek, HdZ 4151, fol. 49v.
- Nalis, *The Van Doetecum Family*, vol. 1, p. 88, no. 38; Florence, Galleria degli Uffizi, Gabinetto dei Disegni e delle Stampe, 240 Ar. This attribution has been recently proposed by Dario Donetti who also provided generous feedback on this

article. Francisco de Holanda later copied this drawing into his 'Album das Antiquallas' of c.1538–40 (El Escorial, Cod. 28-I-20, fol. 46r).

23. On this practice, see most recently Carolyn Yerkes, *Drawing After Architecture: Renaissance Architectural Drawings and Their Reception* (Venice: Marsilio, 2017).

24. 'circa il diritto del quale io non ho voluto disegnare cosa alcuna per tre ragioni: prima, per le gran ruine, che poco d'integro si comprende. Seconda, per la difficoltà del misurarle'. Sebastiano Serlio, *Il terzo libro nel qual si figurano, e descriuono le antiquita di Roma...* (Venice: Francesco Marcolini, 1540), p. 97.

25. On these drawings and related ones in Vienna and elsewhere, see Bernd Kulawik, 'Wer ist der Anonymus Destailleur?', *Scholion* 10 (2016): pp. 229–238; Bernd Kulawik, 'Die Zeichnungen im Codex Destailleur D (Hdz 4151) der Berliner Kunstbibliothek – Preussischer Kulturbesitz zum letzten Projekt Antonio da Sangallo d. J. für den Neubau von St. Peter in Rom' (PhD diss., Technische Universität Berlin, 2002); See also Yerkes, *Drawing After Architecture*, pp. 11–161.

26. Ian Campbell already suggested a possible connection in his article 'Some Drawings from the 'Paper Museum' of Cassiano dal Pozzo and the Berlin Codex Destailleur D', *Pegasus* 6 (2004): pp. 24–28.

27. These drawings are discussed in Heinz Spielmann, *Palladio und die Antike: Untersuchungen seines zeichnerischen Nachlasses* (Stuttgart: Deutscher Kunstverlag, 1959), pp. 66–83, 158–168; Giudo Beltrami, 'The Baths of Diocletian', in Charles Hind and Irena Murray (eds), *Palladio and His Legacy: A Transatlantic Journey* (Venice: Marsilio, 2010), pp. 100–106; On their relation to the Cock prints, see De Jong, 'Thermae Diocletiani', pp. 32–37.

28. Examples include Wolfgang Lotz, 'Das Raumbild in der Architekturzeichnung der italienischen Renaissance', *Mitteilungen des Kunsthistorischen Instituts in Florenz* 7 (1956): pp. 193–226; Christoph Thoenes, 'Vitruv, Alberti, Sangallo: Zur Theorie der Architekturzeichnung in der Renaissance', in Andreas Beyer, Vittorio Lampugnani, and Gunter Schweikhart (eds), *Hülle und Fülle: Festschrift für Tilmann Buddensieg* (Alfter: VDg, 1993), pp. 565–584; James Ackerman, 'Introduction: The Conventions and Rhetoric of Architectural Drawing', in James S. Ackerman and Wolfgang Jung (eds), *Conventions of Architectural Drawing: Representation and Misrepresentation* (Cambridge: Graduate School of Design, 2000), pp. 9–36.

29. See for example Cammy Brothers, 'Architecture, History, Archaeology: Drawing Ancient Rome in the Letter to Leo X and in Sixteenth-Century Practice', in Lars Jones and Louisa Matthew (eds) *Coming About...: A Festschrift for John Shearman* (Cambridge: Harvard University Art Museums, 2001), pp. 135–140; Ann Huppert, 'Envisioning New St. Peter's: Perspectival Drawings and the Process of Design', *Journal of the Society of Architectural Historians* 68:2 (June 2009): pp. 159–177. In the context of the Low Countries, see Charles van den Heuvel, "'Tsamenspreckinghe betreffende de Architecture ende Schilderkonst": Schilders, architecten en wiskundigen over de uitbeelding van architectuur', *Incontri* 9:1 (1994): pp. 69–85.

30. Some Renaissance draftsmen did attempt to use orthography to create flattened renderings of complete interiors. The unknown author of the so-called Vitruvio Ferrarese (c.1520s), for example, represented the interior of the Pantheon in a single, unfurled image, with the dome divided into four sections like a contemporary gore globe map (Ferrara, Biblioteca comunale Ariostea, Il.176, fols. 65v–66r). Hermann Vischer the Younger (c.1515–16) similarly transformed the interior of the Pantheon and an octagonal chapel into a completely flat, splayed projection (Paris, Musée du Louvre, Cabinet des Dessins, 19028, 19030, 19064).

31. On the graphic study of the Baths of Diocletian in the Renaissance, see Maximilian Schich, 'Rezeption und Tradierung als komplexes Netzwerk: Der CENSUS und visuelle Dokumente zu den Thermen in Rom' (PhD diss., Humboldt-Universität zu Berlin, 2009), pp. 102–205.

32. Florence, Galleria degli Uffizi, Gabinetto dei Disegni e delle Stampe, 1861 Ar, 1862 Ar, 1863 Ar. These same drawings also appear in the so-called Salzburg Codex created by a Lombard draftsman in the 1470s (Salzburg, Universitätsbibliothek, Ms. Ital. M III 40, fols. 26v–30r) and the manuscript treatise produced by Antonio da Faenza around 1520 (Paris, Private Collection). See Arnold Nesselrath, 'Monumenta Antiqua Romana: ein illustrierter Rom-Traktat des Quattrocento', in Richard Harprath and Henning Wrede (eds), *Antikenzeichnung und Antikenstudium in Renaissance und Frühbarock* (Mainz: Philipp von Zabern, 1989), pp. 21–37. Timo Strauch, 'Antonio da Faenza and the Study of the Baths of Diocletian in the Early Sixteenth Century' (paper presented at the annual meeting of the Renaissance Society of America, Berlin, Germany, 26–28 March 2015).

33. Vienna, Albertina, AZ Egger 13v–16v (Sketchbook C). On these drawings in general, see Hubertus Günther, *Das Studium der antiken Architektur in den Zeichnungen der*

Hochrenaissance (Tübingen: Wasmuth, 1988), pp. 203–241; Susanna Valori, *Disegni di antichità dell'Albertina di Vienna* (Rome: De Luca, 1985), pp. 75–132.

34. On the history of the history of Baths before being transformed into the church of S. Maria degli Angeli, see Patrizia Pesci, 'Una fabbrica in abbandono', in Alessandro De Falco (ed.), *Santa Maria degli Angeli e dei Martiri: incontro di storie* (Viterbo: BetaGamma, 2005), pp. 23–33; Giulia Tozzi, 'Le Terme di Diocleziano. Dall'abbandono al riuso', in Rosanna Friggeri and Marina Magnani Cianetti (eds), *Le Terme di Diocleziano / La Certosa di Santa Maria degli Angeli* (Milan: Electa, 2014), pp. 212–229.

35. 'non sine admiratione quadam quid sibi voluerit ad tam vilem usum tanta aedificiorum moles, tot tantarumque columnarum, tam varii generis marmorum apparatus'. Poggio Bracciolini, 'De varietate fortunae', in Roberto Valentini and Giuseppe Zucchetti (eds), *Codice Topografico della Città di Roma*, 4 vols (Rome: Tipografia del Senato, 1940–53), vol. 4, p. 236.

36. On the ancient water system, see Leonardo Lombardi and Elettra Santucci, 'Gli impianti tecnici delle Terme di Diocleziano', in Friggeri and Magnani Cianetti (eds), *Le Terme di Diocleziano*, pp. 77–103.

37. Fabio Calvo, *Antiquae urbis Romae cum regionibus simulachrum* (Rome: Ludovico degli Arrighi, 1527), p. F ii. On the balneum woodcut, see Philip J. Jacks, 'The Simulachrum of Fabio Calvo: A View of Roman Architecture all'antica in 1527', *The Art Bulletin* 72:3 (1990): pp. 463–474. Guillaume du Choul, *Des Bains et Antiques Exercitations Grecques et Romaines* (Lyon: Guillaume Rouillé, 1554), pp. 8v–9v. This publication, which was reprinted the following year in Italian, is based on a manuscript produced around 1539 (Paris, Bibliothèque nationale de France, MS Français 1314).

38. Hubert Goltzius, *Vivae omnium fere Imperatorum imagines* (Antwerp: Coppens van Diest, 1557), p. 58r. The motto 'nihil difficilius quam bene imperare' ('nothing is more difficult than to rule well'), which also comes from Goltzius, seems to have been taken from the *Historia Augusta* (26.43).

39. 'Ista vetustatis monimenta illustria, quondam / Sacro Christiadum structa è sudore, superbum / Ceu quoddam Urbis opus, miserandis acta ruinis / Iam propè corruerant prorsum, tenebris'que profundis / Iam computruerant, paucis vix cognita, densis / Obruta pulveribus, spectatu triste cadaver: / At pius ille Heros, Heros Antonius ille / Perrenotus, cernens corpus tam nobile sterna / Tellure, & caeco veluti squallere sepulchro, / Indoluit, sortem'que rei miseratus iniquam, / Quæsiit, & subito invento medicamine, tetro / E busto excitum redidivum reddidit, & ecce / Quæ dudum horrendo iacuerunt pondere Thermae / Prolapsæ in terram, confestim robore sumpto / Antiquo, surgunt, & grandi mole recepta / Attollunt caelo caput, alto & vertice vastos / Exæquant monteis, nullo unquam tempore deinceps / Casura, donec prævastî hæc ardua mundi / Machina durabit. Porrò gravis ille piorum / Christiadum sudor, gravis illa afflictio, sævi / Illa Diocletis rabies durissima, sanctos / In Coeli civeis, longo iam tempore fermè / Mentibus humanis paulatim exempta, benigno / Perrenoti officio rursus expectata revixit, / Officio eiusdem totidem memoranda per annos, / Quot iam instauratæ stabunt per secula Thermae, / Et quot Perrenoti resonant sæcula nomen'.

40. On the political implications of the prints and Granvelle's larger project of appropriating antiquity for personal and professional advantage, see Wouk, 'Antoine Perrenot de Granvelle', pp. 55–61.

41. 'ac pro suo erga veteres artes adfectu formis areis incidi excudi publicariq' coaravit atque ab extremo interitu vindicavit'. See also note 17.

42. On these early drawings, see Hans Josef Böker, *Architektur der Gotik: Bestandskatalog der weltgrößten Sammlung an gotischen Baurissen (Legat Franz Jäger) im Kupferstichkabinett der Akademie der Bildenden Künste Wien* (Salzburg: Pustet, 2005); Hans Josef Böker, *Architektur der Gotik: Rheinlande* (Salzburg: Müry Salzmann, 2013); Hans Josef Böker, *Architektur der Gotik: Ulm und Donauraum* (Salzburg: Müry Salzmann, 2011); Malvina Borgherini, *Disegno e progetto nel cantiere medievale: Esempi toscani del XIV secolo* (Venice: Marsilio, 2001); Lize Braat, *Dessins, Cathédrale de Strasbourg* (Strasbourg: Musées de Strasbourg, 2014); Robert Bork, *The Geometry of Creation: Architectural Drawing and the Dynamics of Gothic Design* (Farnham: Ashgate, 2011).

43. Strasbourg, Musée de l'Oeuvre Notre-Dame, inv. 3, 274 × 70 cm (c.1270s); Vienna, Wien Museum Karlsplatz, 105.069, 326.7 × 69.7 cm (c.1300).

44. Vienna, Wien Museum Karlsplatz, 105.067, 478.6 × 86 cm; Vienna, Akademie der bildenden Künste, Kupferstichkabinett, 17.061, 491.5 × 84.6 cm. This drawing is part of a collection of hundreds of architectural drawings on parchment at the Akademie. Later drawings for Strasbourg are almost as large: Strasbourg, Musée de l'Oeuvre Notre-Dame, inv. 5, 410 × 82.5 cm (c.1365); Bern, Bernisches Historisches Museum, Inv. 1962, 461 × 81 cm (c.1400–20).

45. In addition to the many Germanic examples cited by Böker, see also Ghent, Belfry, 225 × 24 cm (1313–23) [Ghent, Stadsmuseum, 462]; Florence Cathedral Campanile, 222.5 × 31.5 cm (1334) [Siena, Museo dell'Opera del Duomo, inv. 154]; Rouen, Cathedral, Crossing Tower, 340 × 64.5 cm (1516) [Houston, Museum of Fine Arts, 2018.123]; Mechelen, Sint-Romboutskathedraal, 345 × 65 cm (c.1520, or perhaps 1550) [Mons, Archives de l'État, Document précieux 4].

46. [Cologne, Dombauarchiv, Riß F, 406 × 166 cm. Böker, *Architektur der Gotik: Rheinlande*, pp. 348–51, no. 129. 47. *Illustrated Bartsch* (New York: Abaris Books, 1978–), vol. 8, pp. 134–139; vol. 9, pt.1, pp. 182–189, 247–248, pt. 2, 343. On the issue of the function of these prints, see Oliver Kik, 'From Lodge to Studio: Transmissions of Architectural Knowledge in the Low Countries 1480–1530', in Piet Lombaerde (ed.), *Notion of the painter-architect in Italy and the Southern Low Countries* (Tournhout: Brepols, 2014), pp. 73–88; Allison Stielau, 'Intent and Independence: Late Fifteenth-century Object Engravings', in Jeffrey Chipps Smith (ed.), *Visual Acuity and the Arts of Communication in Early Modern Germany* (Farnham: Ashgate, 2014), pp. 21–42.

48. An early exception, measuring 70.8 × 51.2 cm, is an engraved view of ruined temple produced by Bernardo Prevedari after drawing by Donato Bramante in 1481. Some later examples include Antonio Salamanca, *Vera Antiqui Capitolii Descriptio*, ca.1540 [42 × 88 cm]; Natale Bonifacio da Sebenico after Domenico Fontana and Giovanni Guerra, *Moving the Vatican Obelisk* (1586) [52.9 × 111.6 cm]; Natale Bonifacio da Sebenico after Domenico Fontana Giovanni Guerra, *Raising the Vatican Obelisk* (1586) [49.5 × 113 cm].

49. Few sixteenth-century examples printed from copperplates exceed 80 cm. Ad Stijman, *Engraving and Etching 1400–2000* (London: Archetype Publications, 2012), pp. 144–145.

50. The largest woodblocks were cut along the grain and printed using either platen presses or simply by applying pressure to the back of the block. Barbari created his map of Venice on six sheets of specially made paper (each measuring about 66 × 99 cm) likely using a custom-made press. Juergen Schulz, 'Jacopo de' Barbari's View of Venice: Map Making, City Views, and Moralized Geography before the Year 1500', *The Art Bulletin* 60:3 (1978): pp. 425–474.

51. Major studies of large prints include Horst Appuhn and Christian von Heusinger, *Riesenholschnitte und Papiertapeten der Renaissance* (Unterscheidheim: Uhl, 1976); Larry Silver and Elizabeth Wyckoff (eds), *Grand Scale: Monumental Prints in the Age of Dürer and Titian* (New Haven: Yale University Press, 2008).

52. Thomas Schauerte, 'Die 'Ehrenpforte' Kaiser Maximilians I', in Rainer Schoch, Matthias Mende, Anna Scherbaum (eds), *Albrecht Dürer, das druckgraphische Werk*, 3 vols (Munich: Prestel, 2001), vol. 2, pp. 393–412, no. 238.

53. There is a coloured example in the Germanisches Nationalmuseum in Nuremberg and a gilt one at the British Museum. Dagmar Eichberger, 'Die große Säule mit Satyr', in Schoch, Mende, Scherbaum (eds), *Albrecht Dürer*, vol. 2, pp. 440–441, no. 247. Heinrich Voghter the Elder produced a modified, reduced-scale copy of this woodcut around 1540.

54. Christian von Heusinger, 'Ornamente und Tapeten von Dürer, Beham, Altdorfer und Jörg Seid', in Appuhn and von Heusinger, *Riesenholschnitte*, pp. 11–13.

55. Michael Bury, *The Print in Italy: 1550–1620* (London: British Museum Press, 2003), pp. 63–65.

56. Well-known early examples include: Jacob of Strasbourg after Benedetto Bordon, *Triumph of Caesar* (1504); Hans Burgkmair, *King of Cochin* (1508); Lucentonio degli Uberti, *The Triumph of Christ* (c.1516); Andrea Andreani after Titian, *Triumph of Christ* (1517). Larry Silver, 'Triumphs and Travesties: Printed Processions of the Sixteenth Century', in Silver and Wyckoff (eds), *Grand Scale*, pp. 14–32.

57. See in this volume Eva Michel 'Scrolling the Emperor's Life and Triumph'.

58. *La magnifique et sumptueuse pompe funèbre faite aus obseques et funérailles du trèsgrand et trèsvictorieux empereur Charles cinquième, célébrées en la ville de Bruxelles le XXIX. jour du mois de décembre M.D.LVIII. par Philippe Roy catholique d'Espagne son fils* (Antwerp: Hieronymus Cock and Christopher Plantin, 1559). Nalis, *The Van Doetecum family*, vol. 1, pp. 67–93, nos. 84–117; Joris van Grieken, 'La magnifique et sumptueuse pompe funèbre... 1559', in Joris van Grieken (ed.), *Hieronymus Cock*, pp. 324–333.

59. The first etching in the series is labeled 'Amplissimo hoc apparatu et pulchro ordine pompa funebris Bruxellis à palatio ad Divæ Gudulæ templum processit cum rex Hispaniarum Philippus Carolo V. Rom. Imp. parenti moestissimus iusta solveret', while the epigram 'Ordo fuit pompæ funebris et iste paratus, cum Rex iusta patri solveret Hesperia' is stretched across the whole sequence.

60. Examples of such narrative topographic views include Hans Sebald Beham, *Entry of Emperor Charles V into Munich*

(1530) [35.6 × 133.7 cm]; Erhard Schoen, *Siege of Budapest* (1541) [44.5 × 142.9 cm]; Lucas Cranach the Younger, *Siege of Wolfenbüttel* (1542) [74.6 × 108.9 cm]; Master HM, *Battle of Mühlberg* (1547) [29 × 110 cm]; Hans Mielich, *Encampment at Ingolstadt* (1549) [109.5 × 306.6 cm].

61. According to a 1527 inventory, Rosselli produced a view of 'Pisa in five sections' ('Pissa in 5 pezi'), 'Rome in three sections of twelve Royal Folio sheets' ('Roma in tre pezi in 12 fogli reali'), 'Constantinople in six sections' ('Gostantinopoli in 6 pezi'), and 'Florence on six Royal Folio sheets' ('Firenze di sei fogli reali'). Only one sheet of the Florence set survives (Florence, Società Colombaria). Arthur M. Hind, *Early Italian Engraving*, 2 vols (London: Bernard Quaritch, 1938), vol. 1, pp. 304–309; David Friedman, "'Fiorenza': Geography and Representation in a Fifteenth-Century City View', *Zeitschrift für Kunstgeschichte* 64:1 (2001): pp. 56–77; Jessica Maier, 'Francesco Rosselli's Lost View of Rome: An Urban Icon and Its Progeny', *The Art Bulletin* 94:3 (2012): pp. 395–411.

62. On this tradition, see Lucia Nuti, 'The Perspective Plan in the Sixteenth Century: The Invention of a Representational Language', *The Art Bulletin* 76:1 (1994): pp. 105–128.

63. The earlier Tavola Strozzi (Naples, Museo nazionale di San Martino), given to the Neapolitan king Ferrante by Filippo Strozzi in 1473, for example, employs a somewhat similar sweeping panoramic perspective. On the Reuwijk woodcut and its possible sources, see Frederike Timm, *Der Palästina-Pilgerbericht des Bernhard von Breidenbach und die Holzschnitte Erhard Reuwicks: Die Peregrinatio in terram sanctam (1486) als Propagandainstrument im Mantel der gelehrten Pilgerschrift* (Stuttgart: Hauswedell, 2006), pp. 173–177.

64. *Antverpia mercatorum emporium* (1515) [53 × 220 cm]; Anton Woensam, *Colonia* (1531) [59.2 × 352.6 cm].

65. *Leuven* (c.1540) [53 × 268 cm]; *Braunschweig* (1547) [37.5 × 150 cm]; Elias Diebel, *Lubeck* (c.1552) [68 × 330.5 cm]; Hanns Lautensack, *Nuremberg* (1552) [29.7 × 152.8 cm].

66. Only the third edition of this work survives, Cornelis Anthonisz., *Onderwijsinge vander zee*, 3rd ed. (Amsterdam: Jan Ewouts, 1558). Otto Steppes, 'Cornelis Anthonisz 'Die Onderwijsinge van der zee' (1558)', *Die Bake: Verlag für Küstenforschung Nordseebad Jüer 9* (1966): pp. 7–42. See also Günter Schilder and Marco van Egmond, 'Maritime Cartography in the Low Countries During the Renaissance', in David Woodward (ed.), *The History of Cartography Volume 3: Cartography in the European Renaissance, 2 vols* (Chicago: University of Chicago Press, 2007), vol. 2, pp. 1385–1389.

67. On this phenomenon more broadly, see especially the chapter 'The Mapping Impulse in Dutch Art', in Svetlana Alpers, *The Art of Describing: Dutch Art in the Seventeenth Century* (Chicago: University of Chicago Press, 1983), pp. 119–168.

68. Berlin, Staatliche Museen zu Berlin, Kupferstichkabinett, 79 D 2, fols. 16r (Heemserckck, *View from Monte Mario*), 58v (Heemserckck, *View from St. Peter's*), 18r, 55r (Heemserckck, *View from Aventine*), 72v, 18v (Heemserckck, *View from Janiculum*); Berlin, Staatliche Museen zu Berlin, Kupferstichkabinett, 79 D 2 a, fols. 91v–92r (Posthumus, *View from Capitoline*), 92v–93r (Posthumus, *View from Aventine*). Nicole Dacos has suggested the finished nature of the drawing from the Capitoline Hill indicates it may have been executed after a preexistent model, 'Hermannus Posthumus: Rome, Mantua, Landshut', *The Burlington Magazine* 127:988 (1985): p. 437. On these drawings in general, see Christian Hülsen and Hermann Egger, *Die römischen Skizzenbücher von Marten van Heemskerck*, 2 vols (Berlin: J. Bard, 1913–16); Nicole Dacos, 'L'Anonyme A de Berlin: Hermannus Posthumus', in Richard Harprath and Henning Wrede (eds), *Antikenzeichnung und Antikenstudium in Renaissance und Frühbarock* (Mainz: P. von Zabern, 1989), pp. 61–80.

69. On Van den Wyngaerde, see Richard L. Kagan (ed.), *Spanish cities of the golden age: the views of Anton van den Wyngaerde* (Berkeley: University of California Press, 1989).

70. Urban surveying in the sixteenth century also relied heavily on the bussola, which combined the graduated circle of an astrolabe, a compass, and a sighting device to measure angles. On architectural surveying, see recently David Friedman, 'Geometric Survey and Urban Design: A Project for the Rome of Paul IV (1555–1559)', in Anthony Gerbino (ed.), *Geometrical Objects: Architecture and the Mathematical Sciences 1400–1800* (New York: Springer, 2014), pp. 107–134.

71. See Pieter Martens and Dirk van de Vijver, 'Engineers and the Circulation of Knowledge in the Spanish Netherlands', in Sven Dupré, Bert De Munck, Werner Thomas, and Geert Vanpaemel (eds), *Embattled Territory: The Circulation of Knowledge in the Spanish Netherlands* (Ghent: Academia Press, 2015), pp. 73–106; Jessica Maier, *Rome Measured and Imagined: Early Modern Maps of the Eternal City* (Chicago: University of Chicago Press, 2015), pp. 78–96.

72. See Kim Veltman, 'Military Surveying and Topography: The Practical Dimension of Renaissance Linear Perspective', *Revista da Universidade de Coimbra* 27 (1979): pp. 329–368.

73. 'Item scaenographia est frontis et laterum abscedentium adumbratio ad circinque centrum omnium linearum responsus.' Vitruvius, *Ten Books of Architecture*, Ingrid D. Rowland (trans.) (Cambridge: Cambridge University Press, 1999), pp. 24–25 (I.2.2); Maria Teresa Bartoli, 'Orthographia, Ichnographia, Scaenographia', *Studi e documenti di architettura* 8 (1978): pp. 197–208.

74. 'La terza idea è il profilo, detto sciografia, dal quale grande utilità si prende, perche per la descriptione del profilo si rende conto delle grossezze de i muri, de gli sporti, delle ritrattioni d'ogni membro, et in questo l'Architetto come Medico dimostra tutte le parti interiori, et esteriori delle opere.' Vitruvius, *I dieci libri dell'architettura*, (ed. and trans.) Daniele Barbaro (Venice: Francesco Marcolini, 1556), pp. 19–20. Robert Tavernor "Brevity Without Obscurity": Text and Image in the Architectural Treatises of Daniele Barbaro and Andrea Palladio, in Rodney Palmer and Thomas Frangenberg (eds), *The Rise of the Image: Essays on the History of the Illustrated Art Book* (Aldershot: Ashgate, 2003), pp. 112–118.

75. Bernardino Amico, *Trattato delle piante & immagini de sacri edifizii di Terra Santa...* (Florence: Pietro Cecconcelli, 1620), pp. 7, 26. Kathryn Blair Moore, *The Architecture of the Christian Holy Land Reception from Late Antiquity Through the Renaissance* (Cambridge: Cambridge University Press, 2017), pp. 274–277.

76. Andres Lepik, *Das Architekturmodell in Italien 1335–1550* (Worms: Wernersche Verlagsgesellschaft, 1994), pp. 34–42. Northern European architects also produced similar models. In the Low Countries, an extraordinary, still-extant example is the stone model Joos Metsys and Jan Beyaert created between 1525 and 1530 for the upper facade of Sint-Pieterskerk in Leuven [8.27 × 2.3 m]. Merlijn Hurx and Konrad Ottenheim, "To See Its Form Considerably Better": Architectural Models in the Low Countries, 1500–1700, in Sabine Frommel (ed.), *Les Maquettes d'Architecture* (Paris: Picard, 2015), pp. 225–227.

77. See Sandro Benedetti, *Il grande modello per il San Pietro in Vaticano: Antonio da Sangallo* (Rome: Gangemi, 2009). Other large wooden examples include Giovan Pietro Fugazza's model of Pavia Cathedral (1497–1519) made after the designs of Giovanni Antonio Amadeo and Giacomo Antonio Dolcibuono [5.05 × 3.64 × 3.64 m], and the 1:15 scale model of the dome of new St Peter's (1558–61), created after the designs of Michelangelo [5 × 4 × 2 m]. On wooden models in general, see Henry A. Millon, 'Models in Renaissance Architecture' in Henry A. Millon and Vittorio Magnano Lampugnani (eds), *The Renaissance from Brunelleschi to Michelangelo: The Representation of Architecture* (New York: Thames and Hudson, 1994), pp. 18–73.

78. Michelangelo, in a famous letter to Bartolomeo Ferratini dated January 1547, stated that anyone who looks at Sangallo's model with unprejudiced eyes can see how his outer ambulatory 'takes away all the light from Bramante's [original] plan...without providing any of his own', creating 'many dark lurking places above and below,' E. H. Ramsden (ed. and trans.), *The Letters of Michelangelo*, 2 vols (Stanford University Press, 1963), vol. 2, p. 69.

79. Madrid, Museo del Prado, D005526 [194 × 96 cm]. Francisco Javier Sánchez Cantón, 'El dibujo de Juan Guas. (Arquitecto español del siglo XV)', *Arquitectura* 10, no. 115 (1928): pp. 339–47.

80. Bologna, Museo di San Petronio, inv. 50 [1.72 × 2 m]. Richard J. Tuttle, 'Baldassarre Peruzzi e il suo progetto di completamento della basilica petroniana', in Mario Fantì and Deanna Lenzi (eds), *Una basilica per una città* (Bologna: Istituto per la storia della Chiesa di Bologna, 1994), pp. 243–250; Ann Huppert, *Becoming an Architect in Renaissance Italy: Art, Science and the Career of Baldassarre Peruzzi* (New Haven: Yale University Press: 2015), pp. 118–126.

81. Torello Saraina, *De origine et amplitudine civitatis Veronae* (Verona: Antonio Putelleto, 1540), unnumbered plate [90.5 × 33 cm]; Gunter Schweikhart, *Le antichità di Verona di Giovanni Caroto* (Verona: Centro per la Formazione Professionale, 1977), pp. 27–29; Giovanna Tosi, 'Verona Romana: I monumenti romani di Verona nella tradizione letteraria veronese del Cinquecento', in Paola Marini (ed.), *Palladio e Verona* (Verona: Neri Pozza, 1980), pp. 57–58. Enea Vico later produced a large engraving of the amphitheatre of Verona (c.1543–67), dedicated to Duke Cosimo de' Medici, that employs the same representational techniques [52.4 × 88.2 cm].

82. In terms of cartography, see Nuti, 'The Perspective Plan in the Sixteenth Century', pp. 108–109; Jessica Maier, 'A "True Likeness": The Renaissance City Portrait', *Renaissance Quarterly* 65:3 (2012): pp. 726–729; On the meaning of the term before the sixteenth century, see Noa Turell, 'Living Pictures: Rereading "Au Vif", 1350–1550', *Gesta* 50:2 (2011): pp. 163–182.

83. The only examples without the publisher's address are those in the British Library, Kungliga Biblioteket (Gardie Collection), and Biblioteca Apostolica Vaticana (Fondo Stampe).

84. The copy in the Österreichische Nationalbibliothek

in Vienna, which has a late sixteenth-century watermark, features black patches that indicate this type of corrosion, Fuhring, 'Thermae Diocletiani', p. 119.

85. This painting, now in the Canadian Centre for Architecture (DR1992:0003), is dated 1602 and depicts the Last Supper after Pieter Coecke van Aelst. Heuer, 'A Copperplate for Hieronymus Cock', pp. 96–99.

86. This engraving, titled 'THERMÆ DIOCLETIANI XNOGRAPHIA' corrects the location of the cistern and aqueduct, which was printed in reverse in the original publication, but is nearly identical in every other way including the measurements and scale. It is also roughly the same size (36 × 46.5 cm). Antonio Lafreri likely originally published the engraving as it is listed in the inventory of his successor Stefano Duchet in 1581. Valeria Pagani, 'The Dispersal of Lafreri's Inheritance, 1581–89', *Print Quarterly* 25:1 (2008): p. 15. In 1585, Paolo Graziani sold the plate to Pietro de Nobili, who printed it with his address added (Vatican City, Biblioteca Apostolica Vaticana, Cicognara.XII.3886 (48); Los Angeles, Getty Research Institute, N6920 .S84 1544, vol. 1, fol. 32). Another state without his name is conserved at El Escorial (Real Biblioteca del Monasterio de San Lorenzo, 28-I-15, fol. 61) and London (British Library, Maps 7 Tab. 1, fol. 18). For its mention in the inventory of Pietro de Nobili, see Valeria Pagani, 'The Dispersal of Lafreri's Inheritance, 1581–89—II Pietro de Nobili', *Print Quarterly* 25:4 (2008): p. 375.

87. As Fuhring notes, Bolognino Zalteri published a reverse copy of the print, and Claudio Duchetti later printed a smaller version etched by Ambrogio Brambilla in 1582, Fuhring, 'Thermae Diocletiani', p. 119, n.3.

88. Copies include: Los Angeles, Getty Research Institute, 870672; El Escorial, Real Biblioteca del Monasterio de San Lorenzo, 28-I-15, fol. 62; Bibliothèque nationale de France, Département des Estampes, Vb 67, fol. 82; Paris, Bibliothèque de l'Institut de France, Fol Z 140 Réserve Hors-rang. On this print, see Margaret Daly Davis, 'Corografia delle Terme di Diocleziano (1580)', in Franco Barbieri and Guido Beltrami (eds), *Vincenzo Scamozzi 1548–1616* (Venice: Marsilio, 2003), pp. 190–193. Scamozzi claimed to have created this image from his own measurements, which are indicated throughout, along with four different scales: the ancient Greek and Roman foot and the modern Vicentine *piede* and Roman *palmo*. Nevertheless, the many similarities to Van Noyen's reconstruction suggest these earlier prints served as Scamozzi's principal model.

89. 'Quod utilitatem humani generis, difficultati rerum, ambitioni ac voluptati praeponendam semper duxi; factum est, Joannes Corradi Illustrissime, ut in hac descriptione Thermarum Diocletiani, in qua ita sibi invicem respondent Architectura, et Optice, ut ex ichnographia, ortographia, et mensuris scenographia contemplatur, arte, et diligentia difficultatem omnem superaret (et superarim fortasse) conatus sim: saepe enim fit in optice, ut diligentia, et arte neglecta, opera eurythimia simmetriaque careant.'

90. The term chorographia derives from Ptolemy's *Geography* and was typically applied in the Renaissance to artistically rendered view maps of specific places. Lucia Nuti, 'Misura e pittura nella cartografia dei secoli XVI–XVII', *Storia urbana* 62 (1993): pp. 5–34; Thomas Frangenberg, 'Chorographies of Florence: The Use of City Views and City Plans in the Sixteenth Century', *Imago Mundi* 46 (1994): pp. 41–64. On Scamozzi and the idea of chorography, see Ann Marie Borys, *Vincenzo Scamozzi and The Chorography of Early Modern Architecture* (Farnham: Ashgate, 2014).

91. Cock, for instance, supplied two copies to Christoffel Plantin in 1568 for two florins each. Heuer, 'A Copperplate for Hieronymus Cock', p. 97, from A. J. van Delen, 'Christoffel Plantin als prentandelaar', *De Gulden Passer* 10 (1932): p. 6. In 1582, after the publisher's death, his widow agreed to provide the art dealer and painter Bartholomeus de Momper with a set for two and a half florins. Heuer, 'A Copperplate for Hieronymus Cock', p. 98, from Lydia de Pauw-De Veen, 'Archivalische gegevens over Volcxken Diercx', *De Gulden Passer* 53:2 (1975): p. 229, 246. In both of these transactions, the *Baths* was by far the costliest publication acquired.

92. Charles de l'Écluse to Abraham Ortelius, January 2, 1592, 'Tres illos florenos vestrates cum semisse quos pro Diocletianis thermis debeo, Dresselio tradam proximis vernalibus nundinis Deo volente; rem profecto gratam mihi fecisti quod eas miseris, Pinellus enim, cui gratificari cupio, vehementer eas optabat, et per bibliopolas Venetos hic requisierat jam ante aliquot annos.' John Henry Hessels (ed.), *Abrahami Ortelii et virorum eruditorum ad eundem epistulae* (Cambridge: Cambridge University Press, 1887), p. 498, doc. 207.

93. In 1614, Joannes Rodenborch attached a brief introductory poem to his copy, now preserved in Weimar. The copy at the Kunsthistorisches Museum in Vienna, purchased by Emperor Rudolf II, originally came from the late sixteenth-century collection of Ferdinand, Archduke of Tyrol, at Schloss Ambras. Peter Parshall, 'The Print Collection of Ferdinand, Archduke of Tyrol', *Jahrbuch der Kunsthistorischen Sammlungen in Wien*

78 (1982): p. 167. The example in the Kupferstichkabinett in Dresden was already part of the kunstammer of the Electors of Saxony in 1587. Frank Aurich and Nadine Kulbe, 'Geordnetes Wissen: Die Bücher in der Kunstammer am Dresdner Hof', in Dirk Syndram and Martina Minning (eds), *Die kurfürstlich-sächsische Kunstammer in Dresden Geschichte einer Sammlung: Geschichte einer Sammlung* (Dresden: Sandstein, 2012), pp. 300–301. The volume owned by Count Adolf von Tecklenburg is listed in the 1623/24 inventory of the count's belongings as being bound in parchment with leather straps. 'Thermae Diocletianae Hieronymi Cocchi, in groß fol., in pergamen, mitt lederen riemen'. Jürgen Rohrbach, 'Der Buchbestand auf den Burgen Rheda und Tecklenburg 1623/24', *Tradita Westphaliae* (Münster: Landschaftsverb. Westfalen-Lippe, 1987), p. 322. Another copy, described in Fickler's 1598 inventory of the Munich kunstammer as 'a volume of copperplate engravings applied to cloth, with all kinds of old Roman buildings, by Hieronymus Cock, entitled: Thermae Diocletiani etc. de Anno 1558', ('Ein Volumen auf Tuch gezogen, darauf allerley Romische alte gebew, in kupffer gestochen Hieronimi Cocchij, zuvorderist intitultir: Thermae Diocletiani etc. de Anno 1558'), was previously listed in the inventory of the Munich Hofbibliothek (c.1580–85). Dorothea Diemer, et. al. (eds), *Die Münchner Kunstammer*, 3 vols (Munich: Beck, 2008), vol. 2, pp. 52–53; vol. 3, p. 256.

94. Diemer, et. al. (eds), *Die Münchner Kunstammer*, vol. 2, pp. 34–55. On the interpretation of display practices in the kunstammer, see Lorraine Daston and Katharine Park, *Wonders and the Order of Nature: 1150–1750* (New York: Zone Books, 2001), pp. 255–301.

95. Dirk Jacob Jansen has suggested that the prints may have inspired some aspects of Schloss Neugebäude, built by Emperor Maximilian II outside of Vienna beginning in 1568, 'Adeste Musae, maximi proles Jovis! Functions and Sources of Emperor Maximilian II's Lustschloß Neugebäude', in Sylva Dobalová and Ivan Muchka (eds), *Looking for Leisure: Court Residences and their Satellites 1400–1700* (Prague: Palatium e-Publication, 2017), p. 167. Krista de Jonge, more generally, has proposed they could have been used in the North to create classicising architecture, De Jonge, 'Hieronymus Cock's Antiquity', p. 43. Anthony Gargathy notes that Christopher Wren's designs for the royal palace at Whitehall may have also been inspired by Cock's publication, *The Architectural Drawings of Sir Christopher Wren at All Souls College, Oxford: A Complete Catalogue* (Aldershot: Lund Humphries, 2007), p. 181.

96. Stockholm, Nationalmuseum, Cronstedt Collection, 2467. It is labeled in a later hand 'Corniche del terme di diocletiane Concetto da Rasine di Cocx pictor 2632'. This drawing is also similar in style to others in the collection after the prints of Giovanni Battista Montano, first published in 1624 (CC 1423, 2303, 2458, 2463, 2465, 2468, 2469, 2471, 2472, 2473, 2474). The copies owned by Baron Philipp von Stosch, who died in 1757, are part of an album of drawings of ancient buildings now preserved at the Drawing Matter Collection, Shatwell Farm, Somerset, UK (inv. 2346).

97. The etchings in the inventory of Rusconi's library are listed as 'two long printed pieces of paper of perspectives of the Baths of Emperor Diocletian' ('Doi carte longhe stamptate de prospettive delle terme di Dioclesiano imperatore'). Louis Cellauer, 'La biblioteca di un architetto del Rinascimento: la raccolta di libri di Giovanni Antonio Rusconi', *Arte Veneta* 58 (2001): p. 235. James Gibbs bequest the copy owned by Christopher Wren to the library of the University of Oxford. It is also bound with a drawing of the plan of the Baths of Caracalla along with related sectional sketches. When the belongings of Wren's son were auctioned in 1748, the *Baths* was one of the most expensive items, selling for one pound and four shillings. David Watkin (ed.), *Sale Catalogues of Libraries of Eminent Persons, Vol. 4: Architects* (London: Mansell, Sotheby Parke-Bernet, 1972), pp. 38–39. One of the copies in the Kungliga Biblioteket (105 B 4 b Fol. Roma, Diocletiani Termer), bears the name of Carl Gustaf Tessin, the son of Nicodemus, on the binding. Vasari wrote in his *Lives of the Artists* that 'in architecture and sculpture the most celebrated Flemings are Sebastiaan van Noyen of Utrecht, who served Charles V in some fortifications, and then King Philip' ('Nell'architettura e scultura i più celebrati Fiaminghi sono Sebastiano d'Oia d'Utrech, il quale servì Carlo V in alcune fortificazioni, e poi re Filippo'). This information is almost exactly the same as appears in the *Baths* (see note 14). Giorgio Vasari, *Le vite de più eccellenti pittori, scultori, e architettori*, (ed.) Gaetano Milanesi, 9 vols (Florence: Sansoni, 1906), vol. 7, p. 588.

98. 'The Baths of the Emperor Diocletian, in Latin, with many other designs of structures' ('Las termas del Diocleçiano, enperador, en latín, con otros muchos diseños de fábricas'). Luis Cervera Vera, *Inventario de los bienes de Juan de Herrera* (Valencia: Albatros Ediciones, 1977), p. 171; Miguel Angel Aramburu-Zabala Higuera and María Celestina Losada Varea, 'Juan de Herrera y la cultura clásica', in Jesús Ángel Solórzano Telechea and Manuel Ramón González Morales (eds), *II Encuentro de Historia de Cantabria*, 2 vols (Santander: Universidad de Cantabria, 2002), vol. 2, pp. 758–760.

99. On these prints, see Brown University Department of Art, *Philip II and the Escorial: Technology and the Representation of Architecture* (Providence: Brown University, 1990).

100. On Villalpando's engravings and his theories of architectural representation, see especially Alberto Perez-Gomez, 'Juan Bautista Villalpando's Divine Model in Architectural Theory', *Chora: Intervals in the Philosophy of Architecture* 3 (1999): pp. 125–156; Tessa Morrison, 'Juan Bautista Villalpando and the Nature and Science of Architectural Drawing', *Nexus Network Journal* 12 (2010): pp. 63–73.

101. 'Sed illud videtur esse cum summa laude coniunctum, quod Dei manu, non descriptiones modo, figurae, ac dispositiones omnes, ichnographiae, orthographiae, & scenographiae graphice depictae fuerint; verum etiam longior quidam commentarius à Deo fuerit descriptus, in quo universa Davidi tradita fuerant, & ab eo Salomoni, per artifices opera complenda.' Juan Bautista Villalpando and Jerónimo de Prado, *In Ezechielem explanationes...*, 3 vols (Rome: Luigi Zanetti, Carlo Vullietti, and Alfonso Chacón, 1596–1604), vol. 2, p. 461.

102. 'Der berühmte Cardinal Anton Perrenot Granvelle ließ auf seine Kosten die Diocletianischen Bäder von Sebastian de Oya, königlich spanischem Baumeister in den Niederlanden, zeichnen, und alles genau ausmessen, und diese Zeichnungen sind von Hieronymo Cock, aus Antwerpen in 26 Blättern in Folio mit einer meisterhaften Art und großen Sauberkeit in Kupfer gestochen. Dieses Werk trat nebst einem kurzen Berichte auf zwei Blättern im Jahre 1558 an das Licht, und hat sich überaus selten gemacher'. Johann Joachim Winkelmann, *Anmerkungen über die Baukunst der Alten* (Leipzig: Johann Gottfried Dyck, 1762), p. 34. François Mariet, a doctor from Langres, inscribed a copy now at the Archivo Storico Capitolino 'Ex pinacotheca Francisci Mariet medici Lingonensis. 1692. Veritas saluabit'. The early seventeenth-century antiquarian Claude Gros de Boze owned another example now in the Bibliothèque nationale (Département des imprimés, réserve, J-477 (bis)). The two examples in the Vatican Library were bound into albums. One copy, part of a set of the *Speculum Romanae Magnificentiae* once owned by Leopoldo Cicognara, was likely assembled in the second half of the eighteenth century. The other from the collection of Thomas Ashby is disbound. The set at the British Library is part of a *Speculum* album assembled by Cassiano del Pozzo and his brother Carlo Antonio in the mid-seventeenth century.

103. 'Peu de livres sont aussi rares que celui-ci. Je ne crains point d'ajouter qu'il en est peu de si curieux ni de si intéressans'. As Mariette notes, he also made several additions to this volume. These include a portrait of Cardinal de Granvelle by Lambert Suavius, the 1580 Scamozzi engraving of the Baths, a manuscript plan of the building, and drawings attributed to Michelangelo related to the creation of S. Maria degli Angeli. The architect Pierre-Adrien Paris purchased this copy in 1775 for the sizable sum of 525 livres. Louis-François Trouard then gave it to the Académie royale d'architecture in 1780. Pierre Pinon, 'Pierre-Adrien Paris architecte (1745-1819) ou l'archéologie malgré soi', (PhD diss., Université de Paris-Sorbonne, 1997), vol. 2, p. 248.

104. In general, see Massimiliano David (ed.), *Ruins of Ancient Rome: The Drawings of French Architects who won the Prix de Rome* (Los Angeles: The J. Paul Getty Museum, 1998).

105. Paris, École Nationale Supérieure des Beaux-arts, env. 32 and 70. Paulin later published his drawings as *Thermes de Diocletien* (Paris: Firmin-Didot, 1890).