# The Sculptor-Architect's Drawing and Exchanges between the Arts

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TO WRITE ABOUT SCULPTORS-ARCHITECTS and their drawings is to strike at the very heart of the relationship between the visual arts—the relationship between two three-dimensional arts and their mutual interaction with the planar dimension of drawing and its medium, paper. That this should be an expected, even unproblematic relationship was forcefully argued in one of the most celebrated testimonies of the Renaissance, Giorgio Vasari's *Lives of the Artists* (1550, second edition 1568), which collected between the covers of one book the lives and artistic achievements of the Italian artists of his day. Yet despite Vasari's insistence that drawing (*disegno*, the Italian term also meaning design) was the meeting point of the arts and justified their coming together into the Accademia del Disegno in Florence (started in 1563), this relationship was always fraught and certainly not to be taken for granted.

Indeed, for all Vasari's assurance of artistic overlap, the few surviving drawings by sculptors seem to belie this since widely accepted commonplace. One reason for such paucity may be that the flatness that drawings inevitably imposed made them impractical tools for designing figures in the round and hence inhibited sculptors' use of them.<sup>1</sup> In the case of sculptors who were also architects, however, the nature of the engagement with drawing may be expected to have been different. After all, architects were increasingly voracious users of pen and paper in the sixteenth century, precisely during the time Vasari raised the issue of *disegno* as a shared practice uniting the arts, and remained so for a long time. How architecture and sculpture met and intersected on the terrain of drawing is what this essay proposes to investigate. Of course, it cannot be but an attempt at sketching some areas that deserve further attention. However, as several episodes analyzed below begin to suggest, one such promising area is the sculptor-architect's engagement with the relief as means of understanding three-dimensional form in close dialogue with drawing. Also a classic site of overlap with painting, the relief then may well emerge as the perhaps unexpected terrain where all the arts productively converged.<sup>2</sup>

CAT. 42 Bartolomeo Ammannati Project for the interior side elevation of the church of San Giovannino, Florence (detail)

### The paragone

Vasari himself was the first to cast doubt on the arts' unity based on *disegno* (a major theme of the 1568 edition of his book) when, after extolling its virtues and deep relevance to all three arts, he proceeded to note how often sculptors dispensed with drawing by carving with their iron tools directly into virgin stone.3 However, the terminological ambiguity between design and drawing contained in *disegno* helped suggest that all artists drew, an implication that Vasari certainly reinforced in his definition of the accomplishments of terza *età* artists from Leonardo onward who had brought the arts to perfection. The ambiguity was probably deliberate, for in the first edition Vasari used the words schizzi (sketches) and contorni (contours) to describe the act of drawing in his introduction to the work, whereas in revising these passages later he only used the term *disegno* to make his case for its central role.<sup>4</sup> Yet when he turned to introduce the individual arts-and he focused on painting, sculpture, and architecture, clustering the minor arts under their capacious umbrellas-he made no mention of drawings when attending to sculpture. Indeed, when he explained the sculptor's working process he traced the stages leading up to the finished piece across a series of smallto full-scale models of soft and easily carved materials.<sup>5</sup> In a much more developed statement in the 1568 edition he bracketed out the sculptors altogether, recognizing implicitly that in practice they did not need to turn to drawing.<sup>6</sup> He had already admitted as much in his 1547 (1546 according to the Florentine calendar) response to Benedetto Varchi in which he, alongside seven other artists, including Cellini and Michelangelo, debated the respective nobility of painting and sculpture at the humanist's invitation: "... many sculptors produce excellent work without ever using drawings."7 What the sculptor took from drawing, in his telling, was the "veduta per veduta," or sequence of discrete, step-by-step views of a figure in the round so as to identify "the one that will succeed best" and that he would then sketch out in his model. When it came to the architects, however, Vasari was as adamant as he was unambiguous: sketches (drawings) served "massimamente" since the architect's work "is made up of nothing but lines, and thus the drawing is the beginning and end of his art, since the rest of the work is executed by others, stone carvers and masons."8

Not everyone agreed. Benvenuto Cellini was violently opposed to this supremacy of the flat medium of drawing (and by extension, painting) over sculpture, though he used drawings himself (cat. 26, 32). In his own



letter of 1547 to Varchi, he argued for the primacy of the three-dimensional model and acerbically denigrated the value of the drawing.9 Designs on paper, however beautiful, when turned into three-dimensional objects, he argued, turn out false and foolish ("falso e sciocco"). And he went even further. In his view, Michelangelo's exceptional painting was due to his working from sculpted models, not from drawings. Likewise, for architecture, he continued, Michelangelo's inventions of exquisite windows were conveyed to the stonemasons by way of terracotta models, and only later translated into drawings to explain their exact measurements (fig. 27). This sequence, he admonished, should be followed by all other architects who in their ignorance make a small drawing and from it a model, and as result do not come close to Michelangelo in the beauty of their works.<sup>10</sup> For Cellini then, the drawing was not the essence of the architect's work, quite the contrary. And he concluded that sculpture was the mother of all the arts of design. The choice of term—sculpture as "mother" of the arts—may well be at the root of Vasari's own definition of drawing/disegno as the "father of the arts," trumping Cellini through gender and family precedence in a direct rebuttal to the sculptor with whom he did not see eye to eye.<sup>11</sup>

FIG. 27 Michelangelo Buonarroti *Study of windows and tabernacles*, 1526 Red chalk, pen and ink, on paper, 332 × 227 mm Casa Buonarroti, Florence The debate had no winner, despite Michelangelo's ironic yet largely conciliatory contribution praising both figural arts (the debate had not included architecture, though Cellini brought it up), and the fragmented and fraught funeral monument produced for his tomb nearly twenty years later by the warring painters and sculptors became a testament to the disintegration of ties between artists within the academy rather than their productive co-existence under the aegis of *disegno*.<sup>12</sup> But beyond this sometimes petty and sometimes philosophical discord, these two contemporary artists reveal the complex function of drawing for architecture and sculpture, two arts that were fundamentally three-dimensional and shared both tools and materials (indeed, Vasari's catalogue of stones and quarries in his *Lives*, referring interchangeably to their use by both sculptors and architects, clearly indicates this overlap).<sup>13</sup>

#### Architecture and drawing

At the very origin of Renaissance artistic literature Leon Battista Alberti had acknowledged unease with drawings in his comprehensive treatise De re aedificatoria (c. 1450; printed 1486) when he warned the architect to beware of the flat medium: the model was the real guide to a successful building and would reveal many hidden errors that the drawing inevitably hid (II, 1).14 The association of architecture and sculpture that Alberti implied by way of the model as three-dimensional litmus test for a building design was in fact a common and direct career thread for many Renaissance artists. Starting in the fifteenth century with Michelozzo, Bernardo Rossellino, and Francesco di Giorgio Martini (apprenticed to the sculptor Vecchietta) and continuing in the sixteenth with Jacopo Sansovino and Baccio d'Agnolo (both apprenticed to Andrea Sansovino), Michelangelo and Ammannati (apprenticed to Bandinelli and then Jacopo Sansovino), to name only a few, Vasari's pantheon of most notable architects consisted of artists who started as or apprenticed to sculptors. Even Alberti had been an active participant in resurrecting the art of casting bronze medals and plaquettes in his years in Ferrara.<sup>15</sup> Some became sculptors of note before turning to architecture (such as Sansovino and Ammannati);<sup>16</sup> others moved straight from their sculpture training to architecture, or made the latter their main focus of activity (such as Baccio d'Agnolo). Whichever route they took, the slippage of one art into the other was a common phenomenon.

The sculptor-architect overlap may have been a predominantly Tuscan trait. Already Jacob Burckhardt noted in his Geschichte der Renaissance in Italien (1867) that almost all Florentine Quattrocento artists (and that included most architects) started as goldsmiths, Brunelleschi being only the most celebrated among those who followed this path.<sup>17</sup> The observation that working in metal on reliefs and on figures in the round informed the aesthetic sensibility of artists in Florence when they turned to the other arts-and this meant sharpness of contours, edges, detail, and filigree as well as the *factura* of three-dimensional form-deserves more attention than it has received.<sup>18</sup> Bernard Berenson's famous "tactile forms" in Florentine painting (1896) offer another perspective into this phenomenon, though he does not attribute it directly to training in sculpture nor does he reference Burckhardt. Instead, the sculptor Adolf von Hildebrand's Das Problem der Form in der bildenden Kunst (1893) was one of his significant sources,<sup>19</sup> a work that likewise drew from a deep knowledge of Florentine art (like Berenson, Hildebrand had settled in Florence). What such observations offer in our context is insight into the significant presence of sculpture-based training and the attending artifactual and tactile sensibility arising from it at the root of much Florentine art.

To be sure, the painter-architect was also a growing phenomenon, perhaps less among Tuscans (Vasari's own passage from painting to architecture is somewhat of an exception) and more in the wake of artists such as Bramante and Raphael and their own formative experience in the Urbino milieu steeped in perspective construction concerns. As Erwin Panofsky noted long ago, numerous artists working in the Raphael's *bottega* or influenced by him (such as Perino del Vaga, Giulio Romano, Domenico Beccafumi, etc.) became noted architects, architectural decorators, and designers of façades in a move that he dubbed "the rebellion of the non-architects."<sup>20</sup> And the Lombard painter Giovanni Paolo Lomazzo certainly reinforced the painting-architecture connection in his *Trattato dell'arte della pittura* of 1584, which contains a short but exhaustive treatise on the orders and in which he insisted on the importance of prior painting experience for architects and in particular on the importance of perspective construction for all the arts.<sup>21</sup>

That said, it is clear that sculptors and architects had much in common, not least of all the complicated relationship to drawing.<sup>22</sup> And where and how



#### FIG. 28

Circle of Antonio da Sangallo the Younger *Ionic capital found in Santa Maria in Trastevere measured and drawn in three ways*, c. 1530–46 Pen and brown ink and wash, on paper, 296 × 219 mm Gabinetto Disegni e Stampe degli Uffizi, Florence

#### FIG. 29 Bernardo della Volpaia *The Codex Coner: Studies of bases*, c. 1515 Pen and ink, on paper, 225 × 160 mm Sir John Soane's Museum, London

drawing intersected with the conceptual design and the three-dimensional nature of their art is anything but self-evident. The low survival rate of drawings from some important architects has been attributed to the lack of artistic value their graphic work enjoyed at the time. Thus drawings by Brunelleschi, Alberti, and Francesco di Giorgio (other than small illustrations for his treatise) are among the most egregious absences. Sketchbooks and drawings of architectural details from the Cinquecento are much more plentiful—the Sangallo corpus being among the most notable and vast (fig. 28)—and probably indicate the use and re-use of these copies of ancient fragments by various related workshops.<sup>23</sup> Indeed, Michelangelo's copies of such ornamental details from the Codex Coner show how these sketchbooks functioned as a kind of architectural abacus as well as promoting the fragment as the building block for original ornamental assemblages (figs. 29 and 30).<sup>24</sup>

This practice may not seem that different from the painters' drawings of various bodies and body parts, of characteristic gestures and expressions or of drapery details that formed their "inventory of ideas."<sup>25</sup> Yet it was not really a case of slippage from one art to the other but had more to do with a general strategy and the consequences of recording the fragmented remains of



antiquity in all its forms.<sup>26</sup> Quite often the drawings of body parts recorded in manuals were taken from ancient sculpture fragments and the details were tied to a desire for a close-up view of volume, texture, and shading effects, which would have been impossible to discern in a whole-body representation (see cat. 15). This approach was different from the architects', whose focus on fragments was much more analytical and concerned with developing a corpus of measured ornamental units to be reassembled into ever new assemblages rather than about seeing visual effects in close-up.

What was unique to the architects, however, was that great invention of the early Cinquecento traditionally attributed to Raphael (that is, to a painter-architect), namely the orthographic decomposition of architectural form (although half a century earlier Alberti implies the use of this method, in II, 1).<sup>27</sup> This was a convention or system of notation that allowed a threedimensional object to be translated into three flat planes intersecting at right angles (plan, section, and elevation). As I have argued elsewhere, recomposing antiquity from scattered remains required a set of coordinates on which to plot them so as to permit the reconstruction of what was lost and difficult to imagine whole, and the orthographic set of drawings was an answer to this very specific problem.<sup>28</sup> Since the departure point was not a complete building but its fragments, these drawings functioned like three interconnected grids that allowed information to be added as it was recovered, hence enabling its reconstitution into one whole. However, using FIG. 30

Michelangelo Buonarroti *Ornamental bases and capitals* (copy from the Codex Coner), c. 1516 Red chalk, on paper, 285 × 425 mm Casa Buonarroti, Florence such an approach in the design process (rather than reconstruction) held many pitfalls—and holds many pitfalls to this day, as any architect working in pre-AutoCAD days can amply confirm. Indeed, Alberti signaled the importance of the model, at scale, to test repeatedly from the beginning of design through construction that what the drawings showed would resolve itself into a three-dimensional whole, that the corners actually joined and that there were no awkward intersections of planes and volumes (II, I; IX, IO).<sup>29</sup>

These types and uses of drawing illustrate quite clearly how problematic, though necessary, drawings were to architects, and the complex strategies they resorted to in order to describe accurately the appearance and dimensions of their work. In some ways the sculptors shared these problems. Imagining a figure in the round required seeing it in three dimensions and decomposing and recomposing it on the various facets of the stone to be carved. For some sculptors the solution was to draw directly on the block (rather than on paper) so as to guide their chisel. As Vasari recounts, Michelangelo so produced his works, "drawing on the stone."<sup>30</sup> Evidently, the sculptor's response was not the orthographic set but may have involved a similar "decompositional" strategy. It is this difficult process that sculptors invoked when positioning their art above painting in the *paragone* debates, and that provided another bridge to architecture.

## The relief

When looking at the exchanges between architecture and sculpture across drawings it is also important to recall the types of projects that the two most often shared: alongside monuments, fountains (see cat. 41), and *Kleinarchitektur* (miniature architecture such as ciboria, altars, etc., that was placed indoors and that was carved by the architect-sculptor and his team), the most frequent was the wall-tomb. Though freestanding monuments of various scales also provided cross-pollination (especially as urban devices), the wall-tomb, embedded as it was into the wall and therefore an extension of the architectural fabric, offered the most direct overlap between the two arts.<sup>31</sup> With its architectural frame of niches, arches, pilasters, and entablatures that contained the sarcophagus and the representation of the deceased, quite often the wall-tomb was more architecture than sculpture.

The triumphal arch—with its obvious connotations of triumph over death and oblivion—was a much invoked ancient model that reinforced the genre's hybridity, being itself halfway between architecture and sculpture. It is no surprise therefore that most sculptors started their architectural careers designing such monuments—Michelangelo's unfinished Julius II tomb being one of the most famous examples—aided by the fact that it was also a very frequent commission from patrons eager to commemorate themselves and their dynasties (see cat. 8).

As a result, much of the shared domain between architecture and sculpture lay on the terrain of the tomb monument. Yet as an ensemble it came across as a sculptural high relief since the architectural components could not extend too far into the space of the chapel or church aisle in which it was located, however three-dimensionally the wall-tomb may have been conceived. Thus the wall-tomb became a form of three-dimensional tableau that implied space yet collapsed it into a series of layered planes. In so doing not only did the wall-tomb connect the architect and the sculptor, but through its relief-like quality and relative flatness it brought both closer to two-dimensional representation, that is, to painting and drawing. Significantly, while for Pope Julius's tomb Michelangelo negotiated between architecture and sculpture, thinking it through a relief-like representation, he did so by way of a drawing. This thinking "in relief" is true even of his Medici tombs, despite their arrangement in the round (fig. 31). The chapel walls in white Carrara marble complete with the sarcophagi and figures are independent sculpted units clearly inserted in and separated by the grey pietra serena giant order (or grid), and resolve themselves into giant high reliefs.

Likewise, the design of building façades, often as separate projects conceived much later than the bodies of the buildings themselves, was an exercise in monumental relief work and relief drawing for the architect as well. Just like the wall-tomb, the façade involved window recesses and niches, arches and pediments, series of superimposed columns and freestanding sculpture embedded in it. All of these elements were contained within the thickness of the front wall, and their composition also frequently cited the hybrid genre of the triumphal arch. Indeed, second only to ornamental details, it is the most frequently represented drawing in the corpus of Renaissance architects' graphic work.



FIG. 31 Michelangelo Buonarroti The Medici Chapel, San Lorenzo, Florence (Photograph from Carl von Stegmann and Heinrich von Geymüller, *Die Architektur der Renaissance in Toscana*, vol. 8, 1904) FIG. 32 Michelangelo Buonarroti *The Madonna and Child*, 1522–24 Black and red chalk, pen and brown ink, on paper, 541 × 396 mm Casa Buonarroti, Florence



It is then precisely this oscillation between genres at the root of the relief and between flatness and space that can be sensed in Michelangelo's drawings, which offer a classic example for exploring how a sculptor's drawing and architectural sensibility intersected. For example, the *factura* of a drawing such as *The Madonna and Child* (probably for the Medici chapel group; fig. 32) stands in a close relationship to that of the central portal frame for the Porta Pia (fig. 33): both leap from the page, pushing hard, almost layer by layer, into the viewer's space. The child's highly modeled hip, arm, and torso at the center left of the page, gradually melting into the paper background, give the powerful impression of a sculpted relief—which indeed, the intended arrangement approximated.<sup>32</sup> The image seems to break through the flatness of the paper, pushing through the picture plane as if curving outward, building up gradually into the third dimension, as



FIG. 33 Michelangelo Buonarroti *Study for the Porta Pia, Rome*, c. 1561 Black chalk, pen and ink with watercolor, on paper, 442 × 282 mm Casa Buonarroti, Florence

if offering itself to touch, and back again into the flatness of the support. The pigment and overlays of drawing media intensifying as the forms push outward (black and red pencil, as well as white-chalk highlights), like the collage of two sheets of paper that make up the drawing, reinforce its "sculpted" artifactual quality as well as its tactility.

The Porta Pia drawing (fig. 33) is likewise a relief-like drawing, and quite unlike those produced by "pure" architects who were concerned with precise contours. This drawing manner has been attributed to Michelangelo's weaker eyesight due to old age and alternatively has been labeled a painterly, impressionistic approach.<sup>33</sup> Yet relief-like is perhaps a more accurate way to describe it, for it hints at the mixed qualities of this hybrid genre that crossed painting and sculpture. While the shadows and washes speak of a painterly sensibility, the absence of firm contours alerts not only to visual impressionism but also to a sculptor's insight. Beside recording Michelangelo's efforts to arrive at a final form by way of layering, the pentimenti cause the frame to seem to vibrate, for its contours are unstable and do not resolve themselves into a single line. This out-of-focus contour also seems to imply the spectator's motion around a three-dimensional object that changes and unfolds as the viewer moves. In fact, it recalls just how much the outlines of a human body—Vasari's *contorni* (contours)—are themselves abstractions when drawn on paper, for the body has no contours, only its shadow does, a fact of which a sculptor would have been keenly aware. And with the intense black shading used to model the forms in his drawings, Michelangelo seems to draw the eye with great force and emphasis precisely to those hidden sides that exist just beyond the contours, and just beyond what the drawing can represent, but which the relief, however flat, is nevertheless able to convey.

This is not to say that painters' drawings do not transcend the flatness of the page and that they did not use every means possible to make them do so that charcoal, ink, washes, and chalks permitted. And both the texture of the paper and the body gesture captured by line give them an immediacy that is profoundly compelling. But they do not have the quality of materiality and physical presence that Michelangelo's drawing conveys and that speaks of a carver's sensibility. Besides, sculptors were quick to note that representation on a flat support (whether painting or drawing) was closely related to the relief. Thus Michelangelo was keenly aware of the importance of the relief as well as of its ambiguity and chose to focus precisely on this site of intersection between sculpture and painting in his response to Varchi's question on the relative nobility of the arts: "... it seems to me that painting is considered good when it approaches the relief, and the relief is considered bad when it approaches painting."34 Although Vasari did not go so far, for him the relief was nevertheless a hybrid between sculpture and painting, and he described it in these terms at some length in his introduction to sculpture.<sup>35</sup> Elsewhere he connected relief work, goldsmithery, and drawing when he attributed the invention of copper engraving to the translation of niello work into a printing technique by Maso Finiguerra and his follower the goldsmith Baccio Baldini (to whom Vasari unfoundedly claimed the great Italian painter-engraver Andrea Mantegna had apprenticed so as to stress Tuscan primacy in this art).<sup>36</sup> Even as he stressed the presence of *disegno* as the common thread between metalwork and line engraving, he acknowledged hybrids when he related niello and enamel work and defined them as "a flat relief ... a mixture

FIG. 34 Michelangelo Buonarroti *Profile of a column base for the Medici Chapel, San Lorenzo, Florence,* 1524–25 Pen and ink with black chalk, on paper, 325 × 145 mm Casa Buonarroti, Florence

of painting and sculpture," meaning that one was carved into the picture plane and the other built out from it.<sup>37</sup> Vincenzo Borghini, his friend and one of the principal editors of his *Lives*, was more critical, arguing that the relief was the "*dolce amaro*" (bitter sweet) or "*imperfetto*" of the arts.<sup>38</sup> In the nineteenth century Jacob Burckhardt still echoed this evaluation when he identified the relief as the problematic intermedial genre and saw the penetration of painterly elements into Renaissance sculpture as foreshadowing its ultimate corruption (in his eyes) in the Baroque work of Bernini.<sup>39</sup> In the end perhaps Cellini expressed the relation between drawing and the relief most trenchantly when he insisted on the difference between contour and thickness: "true *disegno* is nothing but the shadow of the relief, such that the relief is the father of all *disegni*." And he concluded that because the greatest praise that a painting can receive is to be thought as good as a relief, "therefore the relief is the true father, which is sculpture, and painting is one of its daughters."<sup>40</sup>

This evident desire to turn the paper into a sculpted object emerges just as powerfully from Michelangelo's *modani*—cutout architectural profiles or templates at full scale—for the Medici Chapel and the Laurentian Library (fig. 34). Starting as drawings, they were cut out with scissors into a form of flat architectural model or very thin relief intended as a template to guide the hand of the stonecutter. This was standard architectural practice, and most architects provided such *modani* or *sagome*: Antonio da Sangallo the Younger, Palladio and sculptor-architects like Bartolomeo Ammannati used them as well (the latter for the architectural profiles of the church of San Giovannino in Florence), while Vincenzo Scamozzi illustrated them at large scale in his 1615 architectural treatise. In Ammannati's case these cutouts were collected and bound and may have been intended for his own treatise on architecture described by Raffaello Borghini, his sixteenth-century biographer.<sup>41</sup>

It has been tentatively argued that the sharpness of edges in the architectural details of Michelangelo's Medici Chapel is indebted to the process of cutting the paper and to the scissors as the instrument of their final adjustment, in other words, that in their "objecthood" the *modani* generated design and were not merely working drawings.<sup>42</sup> More substantial and hence more durable models of these profiles for workshop use were also made of sheets of tin and wood, a form of drawing transposed to a range of materials even closer to sculpture. Indeed, these "drawn" relief profiles were "models" just like the full-scale wooden model of one sculpted wall that



FIG. 35 Michelangelo Buonarroti Studies of variations to the scale of the vestibule of the Laurentian Library, Florence, c. 1525 Red chalk, pen and brown ink and wash, on paper, 386 × 280 mm Casa Buonarroti, Florence



Michelangelo had constructed and tried out.<sup>43</sup> Yet once again this translation of a drawing into an object detached from the paper illustrates both the importance and the limitation of drawings: for architectural details precise contours could be drawn; yet they needed to be translated into objects so as to be turned into three-dimensional forms on the stonecutter's table. In some ways this was not that different from the practice of tailors, another set of artisans dealing with the three-dimensional figure in the round rather than its projection, who likewise had to build their garments around the bodies these garments contained. Such an artifactual modification of drawings as seen in the *modani* provided another bridge between architects and sculptors—a bridge that could be crossed in either direction.

But the *modano* presents yet another inflection in the sculptor-architect's relationship to drawing. While it is a compressed model-relief, it is also an outline, a silhouette. And the silhouette or contour as the trace of a three-dimensional object collapsed onto a flat plane was the other direction a sculptor could engage drawing by way of architecture's tools. Clearly, architectural drawings trade in outlines (fig. 35).<sup>44</sup> In fact, the orthogonal set of drawings, "decomposing" as they do the three-dimensional object and



implying each other at all times, increase the awareness of line as notation for depth, as the trace of a slice through an object. An interest in outline is evident in the case of Ammannati, whose drawings of architectural or sculptural ornament are not relief-like in the manner of Michelangelo but retain the quality of silhouette (fig. 36). A freestanding figure in three dimensions does not have a silhouette as such and needs to be comprehended from all sides. But the overall tableau—of a tomb, of a monument, of a funerary chapel, like architectural ornamental details that are seen from a distant vantage point, attached to a wall of which they are the sculptural projection outward—does present that opportunity. Read as reliefs, walltombs could also be translated into a continuous line, into a silhouette drawing—into the shadow of the relief, in Cellini's words. This is the case of Giambologna's drawing for the Salviati Chapel (fig. 37) or Guglielmo della Porta's design for Paul III's tomb, just as it is the case of a Renaissance palace or church façade.

What this episodic history of the sculptor-architect begins to suggest is that whereas, in the wake of Vasari, theory claimed that *disegno* alone was the intersection point of the arts, the relief was an equally important convergence point in practice. Ultimately this is also where architectural ensemblesas-reliefs touched painting and drawing: the sculptural "tableau" could be abstracted into a flat plane just as the relief monumentalized the pictorial composition. Alberti had implied as much in his *Della pittura* (which was an important model for Lomazzo) when he recommended the painter take his cue from the Meleager sarcophagus as the most vivid example of an *istoria*  FIG. 36 Bartolomeo Ammannati *The Riccardiano notebook: Sketches for a fireplace*, c. 1557-61 Pen and brown ink over black pencil 248 × 184 mm Biblioteca Riccardiana, Florence FIG. 37 Giambologna *The Salviati Chapel in San Marco, Florence*, 1580s Brown ink, on paper, 540 × 425 mm Gabinetto Disegni e Stampe degli Uffizi, Florence



arrangement, in other words, when he recommended a relief as a model for the painter.<sup>45</sup> His view that "pleasing lights [ought to] pass gradually into shadows" in such a painting finds an echo in the connection he implies in *De re aedificatoria* between the surfaces of architecture and the relief. His injunction to combine and bond everything "so that one's gaze might easily flow freely and gently along the cornices, through their recessions, and over the entire exterior and interior face of the work" (IX, 9) describes the scanning of a relief and may well echo Vitruvius's statement that "the sight follows gracious contours."<sup>46</sup> In the final analysis this may well explain Lomazzo's injunction to architects to learn painting as well as why painters and not only sculptors could become architects.

The debate did not end here. "Despite all stylistic differences characteristic of architecture, its object is to unite its forms into a relief effect.... Sculpture undoubtedly emerged from drawing which it pushed into depth, creating the relief. We must conceive of it [sculpture] as the enlivenment of the plane."<sup>47</sup> Thus, more than three centuries later, the sculptor Hildebrand still thought about and claimed just such a unity.

#### Notes

I am grateful to Michael Cole, David Kim, Maria Loh, and Nicola Suthor for reading and commenting on drafts of this essay. All translations are by myself unless otherwise noted.

- I On the sculptors' reluctance to draw—and the origin of this exhibition—see Cole 2011, in particular pp. 187–91.
- 2 On the historiography of the relief, see Payne 2011b, pp. 39–64.
- 3 Vasari-Bellosi and Rossi 1986 (1st ed., 1550), p. 660.
- 4 Vasari-Bellosi and Rossi 1986 (1st ed., 1550), pp. 59–60 and Vasari-Bettarini 1966 (2nd ed., 1568), vol. 1, p. 111. Vasari did, however, identify *disegno* as the "father of the arts" in his letter to Benedetto Varchi of 1546/47, so the concept of a joint root in drawing was already present during the preparation of the first edition of the *Vite*.
- 5 Vasari-Bellosi and Rossi 1986 (1st edn, 1550), pp. 45–47.
- 6 Vasari-Bettarini 1966 (2nd edn, 1568), vol. 1, p. 111.
- 7 "... molti scoltori eccellentemente operano che non disegnano in carta niente": Varchi 1960, p. 30; www.memo fonte.it/home/files/pdf/scritti\_varchi1.pdf.
- 8 Vasari-Bettarini 1966 (2nd edn, 1568), vol. 1, p. 112.
- 9 Varchi 1960, p. 40.
- 10 Varchi 1960, p. 40. Cellini repeats this view in his treatise: Cellini 1983, vol. 2, pp. 47–48. Documents confirm that Michelangelo made clay models for his architecture projects: Millon 1994, pp. 47–50. Brothers also notes Michelangelo's discomfort with drawing and connects it with his increasing use of washes (rather than perspective) to stress shadows and light: Brothers 2012.
- II In his 1546/47 letter to Varchi Vasari had called *disegno* the mother of the arts. Not so in 1568. On Vasari and Cellini, see Collareta 2003, pp. 161–69.
- 12 Wittkower 1964; Jacobs 2002, pp. 426–48; Barzman 2000; Ruffini 2011, Chapter 1.
- 13 Vasari-Bellosi and Rossi 1986 (1st edn, 1550), pp. 19–30.
- 14 Payne 2007, p. 365; Alberti 1988, pp. 33-35.

15 Grafton 2000, pp. 219–22.

16 Highlighting the importance of architecture for sculpture Cole notes this path in the careers of Ammannati and Giambologna, in particular how focused on architecture they both were in their latter years: Cole 2011, p. 194.

- 17 Burckhardt 2000 (1st edn, 1867), pp. 19 and 287.
- 18 Payne 2009.
- Hildebrand 1913 (first published 1893), pp. 100–101;
  Berenson 1896, pp. 4–5.
- 20 Panofsky 1955 (first published 1930), pp. 226-35.
- 21 Lomazzo 1584, p. 410; Payne 2007, pp. 347–68.
- 22 For the important argument about the late sixteenthcentury Florentine sculptors' relationship to architecture evident in their move toward a form of abstraction as result of their significant involvement with architecture, see Cole 2011, pp. 16–20.
- 23 Nesselrath 1986; Günther 1988; Frommel and Adams 1994.
- 24 On Michelangelo and the Codex Coner, see Lotz 1967, pp. 12–19, and more recently Elam 2006, pp. 63–65 and Brothers 2008, pp. 50–64. On the architects' engagement with fragments and assemblage arising from it, see Payne 1998.
- 25 Chapman 2011, p. 21.
- 26 This is a different view from Brothers's, who argues that Michelangelo's architectural drawings were behind his reading of the human body in fragments: Brothers 2008, p. 65. On the fragment as *forma mentis* for Renaissance artists, see Barkan 1999, Chapter 3.
- 27 Alberti 1988, p. 34.28 Payne 2011a, pp. 3–39.
- 29 Alberti 1988, pp. 33–35 and 313; on the vast number of lost Renaissance models, see Millon 1994, p. 19.
- 30 Varchi 1960, p. 30.
- 31 On the urban implications of sculpture, see Cole 2011, Chapter 7.
- 32 On the attribution history, see Ruschi 2007, p. 86.
- 33 Ackerman 1986, p. 251.
- 34 "... la pittura mi par più tenuta buona quanto più va verso il rilievo, et il rilievo più tenuto cattivo quanto più va verso la pittura": Varchi 1960, p. 41. Most recently, using digital technology, Ruschi identifies a "tumultuosa" sequence of superimposed designs in the Porta Pia drawings: Ruschi 2012, p. 242.
- 35 Vasari-Bellosi and Rossi 1986 (1st edn, 1550), pp. 48–49. He describes the *mezzo rilievo* as being similar to painting and the *rilievo stiacciato* as "pure" *disegno* (meaning drawing here).
- 36 Vasari's definition of niello: "un disegno trattegiato e dipinto su lo argento ... fu trovato da gli orefici": Vasari-Bellosi and Rossi 1986 (1st edn, 1550), pp. 84–85; Marini 2011, p. 89; Pon 2004, pp. 107–8.

- 37 Vasari-Bellosi and Rossi 1986, pp. 84-85.
- 38 Payne 2007, p. 367, and Vasari-Bellosi and Rossi 1986 (1st edn, 1550), p. 48; Varchi and Borghini 1998, pp. 128–29.
- 39 Burckhardt 2006, pp. 582, 597; Payne 2011b, p. 39.
- 40 "Il vero disegno non è altra cosa che l'ombra del rilievo, di modo che il rilievo viene a essere il padre di tutti e' disegni ... e la maggior lode che si dà a una bella pittura e' se gli dice: 'La par propriamente di rilievo.' Addunque il rilievo è il vero padre, che è la scultura, e la pittura è un de' sua figliuoli": Benvenuto Cellini, "Discorso sopra l'arte del disegno," in Cellini 1973, p. 1930.
- 41 Cooper 1994; more recently Ruschi 2007, p. 84.
- 42 Paul Joannides in Androsov and Baldini 2000, pp. 132–34, has tentatively suggested that the contour of Michelangelo's profiles for the Medici Chapel column bases that differs from his drawn profiles resulted in part from the act of cutting the paper templates (used as full-scale "models" by the workshop), which constituted a creative moment in its own right.
- 43 Cooper 1994, p. 498; Wallace 1994, p. 88; Payne 2009.
- 44 Already Alberti makes the contours of architectural forms a cardinal point of his theory through the category *finitio* (the third of the triad including *numerus* and *collocatio* in IX, 5) and relates it to *lineamenta* (I, 1): Alberti 1988, pp. 305 and 7, and Payne 2007, p. 364.
- 45 Alberti 1804, p. 57.
- 46 Payne 2007, p. 365.
- 47 Hildebrand 1913, p. 99. "Bei allen Stilunterschieden, welche die Architektur aufweist, bleibt die Aufgabe, ihre Formen als Reliefwirkung zu einigen" (p. 74); "... der Architektur als Kunst dasselbe Gestaltungsprinzip innewohnt, wie der Plastik und der Malerei" (p. 74). Heinrich Wölfflin picked up and further popularized this view when he identified the "relief style": "... erst wenn die plastische Figur als ein Flaches wirkt, obschon sie kubisch ist, hat sie künstlerische Form .... Aus diesem Gesichtspunkte ergibt sich als allgemeinste Form künstlerischer Verarbeitung die Reliefauffassung": Wölfflin 1946, p. 88 (review of Hildebrand's book originally published in Allgemeine Zeitung, Munich, no. 157, 11 July 1893).