# *Introduction*

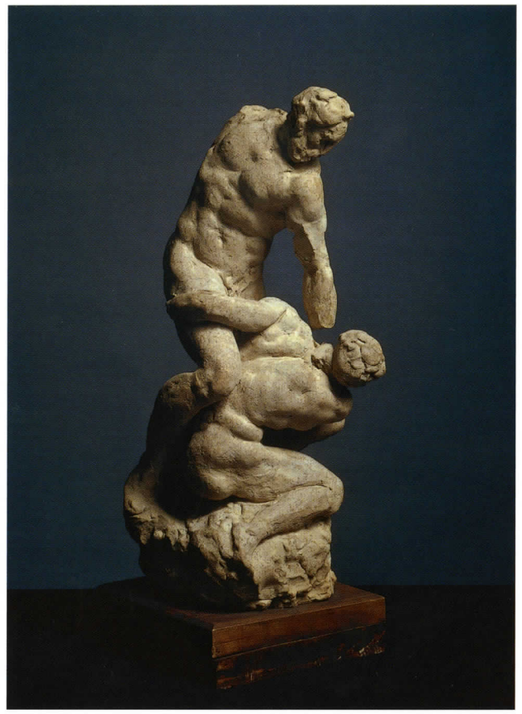
Architects, it is often assumed, arrive at new ideas through drawing. The sketch on a cocktail napkin has become a modern-day shorthand for architectural epiphany, and behind it lies an entire professional culture built on the importance of the sketch.[1] Indeed, drawing is so fundamental to contemporary architectural practices that it is difficult to understand how it ever might have been otherwise.[2] Yet before Michelangelo, few design drawings survive, and the extent to which they were made is largely a matter of speculation.

Michelangelo transformed the purpose and appearance of architectural drawings, and in so doing changed architecture itself. He demonstrated the possibility for architecture to be a vehicle for the imagination equal to painting or sculpture. The distinct character of his drawings reflects his conception of architecture as a system based not only on the imitation and variation of classical models but also on invention. They show the way in which he would start with a remembered form, and how, in drawing and redrawing it, it would take on an entirely different aspect. This study contends that Michelangelo's unusual approach to architectural drawing emerged from his figurative drawing practice.

The irony of Michelangelo's architectural legacy, however, is that his fame eclipsed his influence. In other words, while he acquired renown for "breaking the bonds and chains" of architecture (in the words of Vasari), few were willing or able to follow his lead.[3] The asymmetry between Michelangelo's experimental and exploratory approach to architecture and drawing and its tepid legacy may in part be explained by the advent of architectural education. In the early sixteenth century no formal system of architectural training existed, nor was there a consensus about what it might entail.[4] Similarly, conventions of architectural drawing were not fixed, and indeed a number of Michelangelo's contemporaries, such as Giuliano da Sangallo and Baldassare Peruzzi, also employed a wide range of imaginative representational methods. As the century progressed, so did an increasingly rigid set of expectations about what an architect should know – principally, a canonical set of Roman monuments and the details of the classical orders. Key to the formation of these standards was the use and diffusion of drawings and printed images of Roman monuments, which came to constitute textbooks of ancient architecture.[5] The sheer repetition of a limited set of images narrowed the palette of representational choices and led to greater conformity.

It is tempting to say that Michelangelo was the first to use architectural drawing as a medium of invention, but the record is too uneven to know for certain.[6] Michelangelo's drawings do provide the earliest extensive demonstration of their role in the formation of a design idea. There are a few cases indicating the use of on-site drawings in ancient Rome, and there is the portfolio of drawings on parchment made by Villard de Honnecourt around 1230 to provide some clues about medieval practice.[7] Fif-

Detail of fig. 52



1 Michelangelo, *Hercules and Antaeus*, clay model, 41.9 cm., Casa Buonarroti, Florence

teenth-century architectural drawings present an inconclusive record: most are finished presentation drawings on parchment, but it is unclear how many preparatory drawings may have been made on paper and later destroyed. Of the few drawings that would qualify as architectural sketches, most are by Leonardo, who generated many designs but no buildings.

Architectural drawings proliferated as paper became more widely available than parchment in the sixteenth century.[8] Their subject, however, was limited: the vast majority of drawings depicted fragments of ancient Roman ruins, measured and catalogued. They show architects seeking any information the ruins might provide on the proportions and contours of the ancient orders, and interspersing these studies with reconstructions of Roman temples, palaces, and bath complexes. Michelangelo's position within this tradition is anomalous. His architectural drawings are unlike any by his contemporaries or predecessors, both in aim and appearance. In an era singularly focused on the interpretation and application of Vitruvian principles, his attitude towards them was one of casual disregard. While the only point of consensus about architectural education was that it must entail the direct study of ruins, Michelangelo found an efficient shortcut, by means of copying.

It will not come as news to designers that drawing is a way of thinking, not out loud but on the page. There are, however, parallels with the act of speaking. In a brilliant and witty essay of 1804, later translated as "On the Formation of Thoughts while Speaking," Heinrich von Kleist described the phenomenon according to which the act of having to articulate a thought in front of an audience forces the speaker to bring that thought to completion, often in surprising ways.[9] Although not subject to the same performative pressures, drawing has similar qualities of improvisation, and likewise may lead to unexpected results. Unlike speech, or indeed musical improvisation, drawing leaves traces of the process.

Although Michelangelo left an abundant record of his drawings, another unusual and vital aspect of his architectural design process – the use of clay and wax models as a three-dimensional medium of sketching – has disappeared without a trace.[10] Figure studies in clay and wax do survive at the Casa Buonarroti, Florence, and provide an indication of the quickness and roughness of his work with these materials (fig. 1). Traditionally, architects made finely wrought, large-scale wooden models at the behest of a patron.[11] It was more common for figurative artists to use small working models to arrive at the precise pose of a figure.[12] Thus Michelangelo's use of models as a design tool presents a parallel instance of his adapting the methods of figurative art to the needs of architecture. His use of architectural models may have compensated for his inability or unwillingness to make perspective or spatial renderings of buildings, interior spaces, or, except in rare instances, details. Had they survived, they would have provided another medium, aside from drawing, common to both his figurative and architectural work, and thus another means of comparing his practices.

In general, surprisingly little attention has been paid by scholars to the connections between Michelangelo's activities as a painter, sculptor, architect, and poet. These links would have been much more intuitively obvious in the fifteenth and sixteenth centuries than they are today.[13] In 1568, for example, Benvenuto Cellini stated that Michelangelo "was the greatest architect who ever was, only because he was the greatest sculptor and the greatest painter."[14] Yet much of the literature on Michelangelo has fallen prey to a sort of academic compartmentalization antithetical to the nature of his artistic production. Despite the recent fashion for interdisciplinary studies, the broad trends of intellectual history and artistic practice over the past five centuries have veered towards specialization. But in the fifteenth and sixteenth centuries these activities were interconnected by studio practices, as well as by period writing on art and literature.[15] Many artists engaged in several types of activity rather than just one. Furthermore, many common genres encompassed elements of others: wall tombs, ephemeral arches, frames of paintings, and painted furniture (such as *cassone* and *spalliere*), to name just a few examples.

Ironically, the trend in art and architectural history to move across disciplinary boundaries into economics, history, sociology, anthropology, and other areas has not been accompanied by a similar sense of adventure in challenging the separation of artistic media into distinct categories. It is perhaps more common to find a specialist on painting delving into economic research than considering the relation between painting and decorative arts. In Renaissance studies in particular the fluidity of movement and definition between painting, sculpture, and architecture typical of the period has rarely been matched by scholarly endeavors. It is as if the five hundred years of scholarship since the Renaissance have been devoted to building up the boundaries that fifteenth- and sixteenth-century artists so deftly ignored, or, perhaps more accurately, to creating divisions that would have been meaningless to them. For Renaissance artists and theorists, drawing (*disegno*) constituted the most direct connection between painting, sculpture, and architecture. The Italian word *disegno* refers both to the practice of drawing and to the theoretical conception of a project, or its design, and both of these meanings were considered fundamental to all the arts.[16]

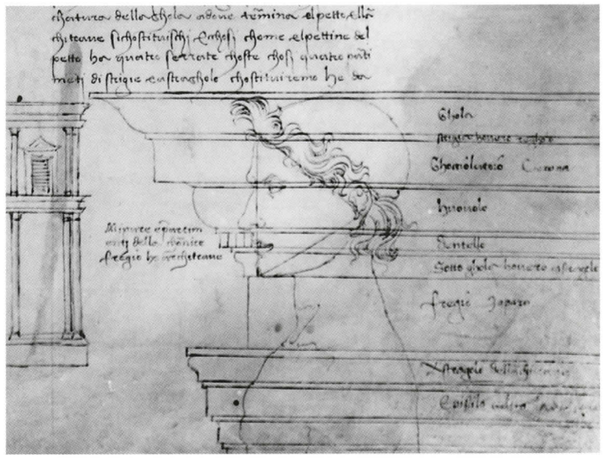
Given theoretical assertions about the unity of the arts, one might reasonably wonder whether the claims made here about the relation between Michelangelo's figurative and architectural drawings might be extended to include other painter-architects as well: Peruzzi, Raphael, Giulio Romano. Unfortunately, the graphic record for these artists is too uneven to allow a parallel analysis. Despite Michelangelo's pruning, the remaining intact drawings represent a remarkable range, displaying all stages of the process, from the formation of the idea to its presentation, for both figurative and architectural subjects. Even if the same were true for his contemporaries, the degree of overlap in technique and approach is unlikely to have been matched. A possible explanation may lie in Michelangelo's insistent self-definition as a sculptor, and his avowed reluctance to undertake any other tasks. As disingenuous as these claims may seem, they are largely confirmed by his drawings. Many facets of his art were shaped by the need for efficiency: always having more work than he could produce, he had no time to waste acquiring specialized skills for each new endeavor.

Michelangelo's architecture has often been described as sculptural. In the sense that many designs include dramatic effects of relief and depth, and that individual elements are conceived with an attention usually reserved for sculpture, the claim seems undeniable. However, the same observation potentially carries a negative, even dismissive connotation, implying that his work does not respond to the architectural tradition or operate according to architectural logic. It is this latter sense that I contest, arguing instead that Michelangelo's architecture, though unorthodox, was conceived in profoundly architectural terms. While in many important ways it resisted some of the fundamental precepts of Vitruvian and Albertian thought, it did so within the framework they established. Indeed, what is generally seen as Michelangelo's transgression is inconceivable except in response to a commonly understood set of rules governing architectural usage.

The relation between Michelangelo's architectural and figurative production has often been interpreted in relation to a fragment of a letter he wrote to Cardinal Rodolfo Pio da Carpi:

> When a plan has diverse parts, all those that are of a single quality and quantity must be adorned in the same mode and manner and similarly their corresponding parts. But when the whole form of the plan changes it is not only permitted, but necessary, to change also the adornments, and similarly their corresponding parts: and the middle parts are always as free as could be; as the nose, that is in the middle of the face, is neither obligated to one nor to the other eye, but one hand is altogether obligated to be like the other, and one eye like the other, with respect to the sides and of the corresponding parts. Because it is a certain thing, that the members of architecture derive from the members of man. Who has not been or is not a good master of the human body, and most of all of anatomy, cannot understand anything of it.[17]

The opening of the letter seems to be a rather contorted articulation of a common idea about symmetry. At the same time, these lines reveal a method of composition not governed, as scholars often assume, by proportion or by the orders.[18] The letter's assertion that "the members of architecture derive from the members of man" had been suggested by the ancient Roman author Vitruvius, who provided authoritative sanction for a wide range of imaginative and speculative explorations of the relation between architecture and the body, each reflecting the individual architect's particular preoccupations and inclinations.[19] Notable among these were the emphatic statements and graphic explications by Francesco di Giorgio and Filarete in their architectural treatises. Writing around 1480, Francesco di Giorgio made literal-minded attempts to uncover and illustrate the etymological and morphological roots of architectural terms and forms in the human body, going so far as to liken human teeth to architectural



2 Francesco di Giorgio, Codex Saluzziano 148, pen and ink, Biblioteca Reale, Turin, fol. 21

dentils, or compare the human body to the fortified city (fig. 2).[20] Thus Francesco had already graphically explored even the analogies between the human face and architecture, to which Michelangelo refers. In his treatise of 1461–64 Filarete, for his part, extended the anthropomorphic aspect of architecture so far as to suggest that an architect's love of building is like a man's love of a woman.[21] Their explorations were personal but not eccentric: such a reasoned author as Alberti compared the center of a house to a man's heart, and Vasari created an elaborate simile linking all parts of the house to sections of the human body.[22] Compared with these authors, Michelangelo devoted relatively little effort to articulating a position. Even though one significant drawing at Windsor shows Michelangelo studying and noting the body's proportions, most of his figurative studies as well as architectural drawings show little interest in precisely calculated proportions or in measurement (*Corpus* 61r; fig. 3).

The last line of the letter contains its most original claim: to understand architecture one must be a master of figures and of anatomy. In practice, many architects did begin as sculptors or painters – Brunelleschi, Francesco di Giorgio, Bramante, Peruzzi, Raphael, and Giulio Romano, to name a few – and thus would have had knowledge of the figure. However, the assertion that this is a necessary prerequisite for architecture, and the specific reference to anatomy, makes it sound as if it is an indirect way for Michelangelo to promote his own architectural credentials.

While these few lines should not be used as the interpretative key to all of Michelangelo's architecture, they do confirm a number of elements seen in his drawings. For example, several of his drawings include anthropomorphic elements, less literal than those of Francesco di Giorgio, but nonetheless explicit (e.g., *Corpus* 56r, 57r, 201r, 498r, 532v). The human profiles that Michelangelo embedded in cornices and bases are generally not evident in the design as built, but the drawings show that they are present at the stage of conception. At another level, the way in which Michelangelo's architecture engages with the body of the visitor, so important in the Laurentian Library, may also be understood broadly as a reflection of the beliefs expressed in the letter (see chapter 4).

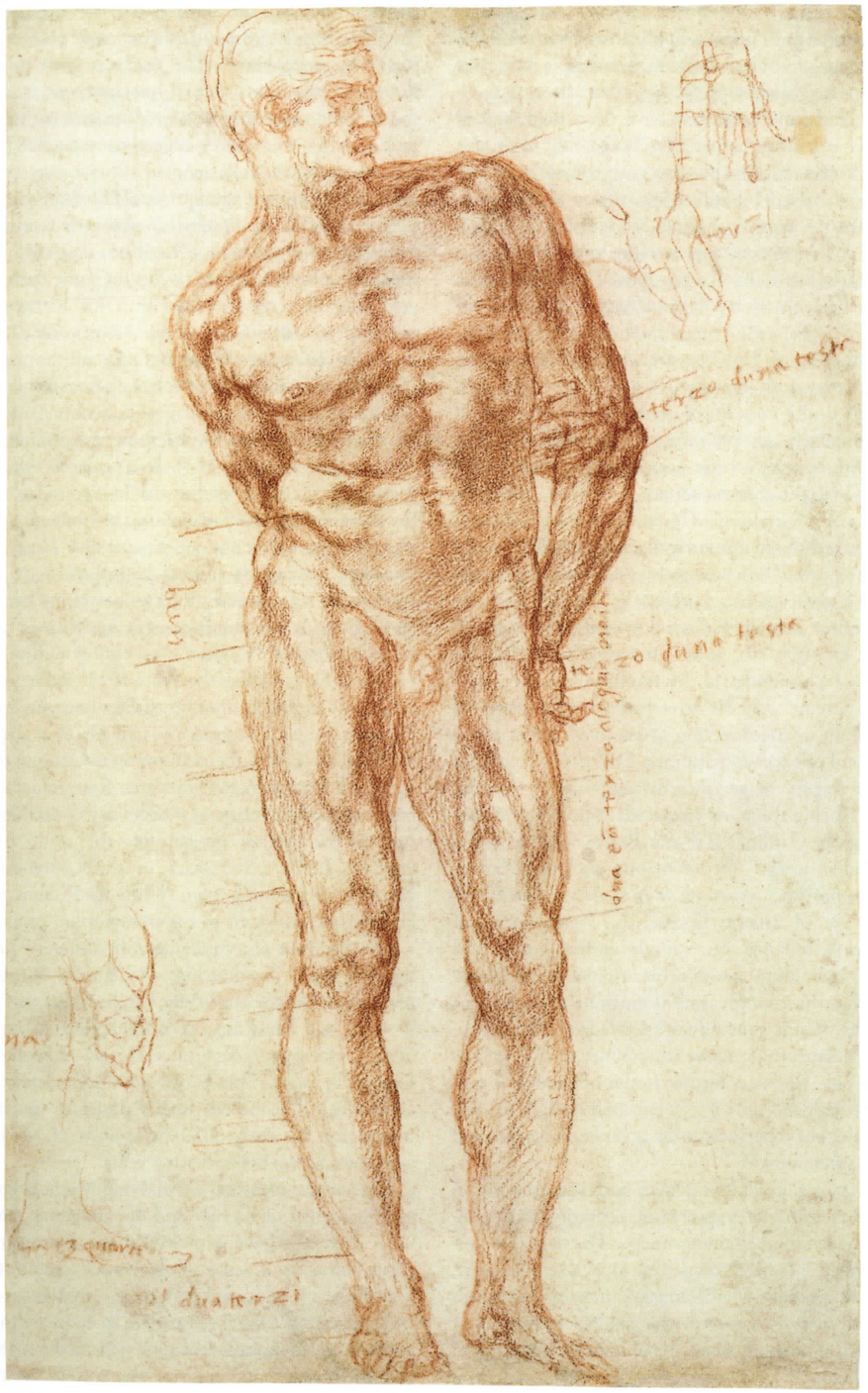
Criticism and commentary from the artist's own time often guide art-historical scholarship. While in general this is a sound means by which to arrive at a historically sensitive interpretation of an artist's work, in Michelangelo's case it carries a number of risks. He was a master craftsman of his own biography and critical reception, and although this fact is frequently noted, his constructed image has proven to be remarkably resilient. Any student of Michelangelo therefore has to contend with the effectiveness of his self-fashioning.[23] The coincidence of so many cultural fixations around Michelangelo – of genius, of originality, of the "Renaissance Man" – only compounds the problem, so that the scholar must continually seek to avoid reliance on known platitudes and on the rhetoric of praise. Not only was Michelangelo able to condition his posthumous reputation, but he also shaped the entire category of "genius" according to his own criteria.

The work of dismantling the concept of genius has been under way for decades, yet it adheres with tenacity to figures such as Leonardo da Vinci and Michelangelo.[24] To critique this notion is not to slight the achievements of these towering figures but only to resist the way in which that denomination closes off certain lines of inquiry, especially with regard to how works came about. Close observation of Michelangelo's process undermines several component elements of the concept of genius, specifically auto-didacticism, isolation, and originality.

Among the myths Michelangelo propagated is that he operated as a lone agent.[25] He was reluctant to use assistants for figural projects, and his failure to effectively train students (with several significant exceptions) has only furthered the fortune of this account. While it has been recognized that many of the innovative features of Michelangelo's architecture were generated in response to restrictive circumstances, he was also spurred by competition with, rejection of, or reaction to the work of his predecessors and contemporaries.[26]

Giuliano da Sangallo, in particular, acted as an important mentor to Michelangelo. Circumstantial evidence abounds regarding their close friendship, but the connection is as often cited as it is little studied.[27] Although Giuliano had been Lorenzo de' Medici's favorite architect in





3 Michelangelo, male figure study, red chalk, 28.9 × 18 cm., Royal Library, Windsor, inv. 12765r (*Corpus* 61r)

the 1480s and 1490s, by the early sixteenth century he had lost favor relative to Bramante, Raphael, and Peruzzi. Thus during the years of Giuliano's greatest and most formative interaction with Michelangelo, his own career was in decline. Their relationship may have been neglected in part because it presents a paradox: how could Giuliano, considered backward by the sixteenth century, be the teacher of such an icon of radical innovation as Michelangelo? But the proximity of their relationship and of a number of their projects begs a more careful, nuanced reading of these facile characterizations. Their connection illuminates the distinction and the continuity between the values of variety (*varietà*), crucial to fifteenth-century Florentine aesthetics, and of license, which gained prominence in the sixteenth century.

Embedded in the concept of genius is that of originality, which similarly deserves critical exploration. Unlike the twentieth-century artistic notion of the mind's blank slate upon which the creative act takes place, the fifteenth-century idea of originality was founded on the practice of imitation: only through imitating the voice of others could one find one's own.[28] Michelangelo's early training in the circle of the great patron Lorenzo de' Medici and the humanist writer Angelo Poliziano would have made it impossible for him to avoid theories of imitation. Nonetheless, he responded to this tradition in an unorthodox, even extreme way. He stretched the boundaries of imitation, both in the direction of excessive closeness to the model and of excessive distance. Still in his youth, he produced a forgery of an ancient sculpture of sleeping Cupid, convincing the most renowned collector of antiquities in Rome, Cardinal Raffaele Riario, that it was a genuine Roman work.[29] Yet his mature work was characterized by its startling departures from tradition and its virtuosic displays of artistic license. A consideration of Michelangelo's reliance on various earlier artists and models does not aim to question his originality but simply to suggest that the concept itself is much more dependent on precedent than is generally acknowledged. The reception of Michelangelo by sixteenth-century critics such as Ludovico Dolce reveals a further irony: originality is recognized and heralded only if it is repeated enough to constitute a style, but repetition itself is generally considered inimical to originality.[30]

Concepts of genius and originality both suggest a vision of the artist as a spontaneous creator, operating independently of precedent and of circumstance. The narrative presented in these pages contradicts some aspects of this image, while affirming others. Michelangelo's drawings, although often quickly executed, reveal the gradual formation of ideas through a series of small steps, none of which is in itself remarkable. In other words, the drawings reveal slow, steady work rather than sudden inspiration. This is not to deny that many of the drawings are, indeed, "inspired," but simply to say that these moments were preceded and followed by many more. The concern with process does, however, privilege internal mechanisms over external forces, and in this sense reinforces an idea of the artist's isolation. While this impression is a consequence rather than an aim of the method adopted here, it may complement other recent studies strongly focused on context.

It is difficult to make the claim that any aspect of Michelangelo's production has been undervalued, or that it cries out for further study. Yet the fame that Michelangelo carefully constructed within his lifetime, and the myths that continue to surround him today, have a tendency to celebrate the perfection of the works while obscuring the process by which they came about.[31] It is this coming about that is the central concern of this book, and of which his drawings have left an exceptional record.

Even with a figure of such renown as Michelangelo, some of his activities are less well known than others. Both his architecture and his poetry continue to receive less attention than his sculpture or painting.[32] His architectural drawings tend to be studied in isolation, or perhaps in relation to a particular project – how they help establish chronology or the sequence of design ideas – rather than for what they reveal about his working methods overall.[33]

The book considers the years of Michelangelo's formation as an architect, from his earliest engagement with the Tomb of Julius II around 1505 to his final departure for Rome in 1534. This focus allows an assessment of the steps by which Michelangelo graduated from reluctant engagement with architecture as a necessary container for sculpture in the earliest projects for the tomb to his bold embrace of its possibilities in the Laurentian Library vestibule and reading room. While his Roman projects are undeniably important to his architectural production as a whole, they are of a fundamentally different nature from his early work. The drawings, too, employ distinct drafting techniques. At the same time, the vocabulary of these later projects, and many aspects of Michelangelo's approach to design, continue to depend on the groundwork laid in his Florentine years. This book's ambition resides not in its chronological scope but in the desire to understand the interaction between different strands of Michelangelo's activities during his formative years.

One of the pleasures of studying Michelangelo is that such a wealth of literary and documentary material survives. Scholars have exploited these sources insightfully, contributing to a sense of the varied circumstances – of politics, economics, and patronage – that shaped his artistic production.[34] My interest here in emphasizing the consistency in Michelangelo's approach across many projects has the effect of underplaying the role of the patron and of other factors external to the artist, but does not mean to suggest that these factors were unimportant. It is my hope, rather, that this study might act as a small counterbalance to the way in which recent interest in contextual analysis has focused so intensely on the particularities of individual projects that one risks losing sight of the artist's role. These circumstances could act as spurs or constraints, but the strength of Michelangelo's artistic personality enabled him to follow his own paths. Ironically, this position would seem to revive the very notion of independent genius that the focus on drawings and on process undermines. The following pages aim to elucidate this apparent contradiction.

In *The Semiotics of Poetry* Michael Riffaterre suggests that poems are inherently irreducible: they defy summary because their meaning cannot be separated from the language in which that meaning is expressed.[35] The same is certainly true of a work of art or architecture, although the entire concept of iconography – or of extracting meaning from the image – depends on the opposite premise.[36] While these theoretical and methodological concerns are not my primary interest here, implicit in my approach is a conviction that drawings contain information unobtainable from any other source (from written documents, literary texts, or finished artworks), and that only through sustained observation does the viewer have any hope of illuminating them. Like Leonardo, I might compare drawings with drafts of poems, but with drawings the problem of summary is perhaps more acute because describing them in language involves an intrinsically flawed act of translation from the visual to the verbal realm (see chapter 1).

The discrediting of connoisseurship and of formalism, the prevalence of Erwin Panofsky's model of iconography, and the impact of Marxism and New Historicism have meant that close attention to art objects has become, in some circles at least, suspect.[37] There is also a perception that to make a detailed study of drawings or works of art in general is somehow elitist or exclusionary.[38] In this book I have aimed to make a case for the contrary view: readers should be able to see many of my observations for themselves.

Vasari equivocated about Michelangelo, praising his accomplishments unreservedly but worrying that his virtuosity would be distorted by attempts at imitation. Vasari's fear points to an irony of Michelangelo's historical position: his transformation of existing conventions and forms was so personal and so complete as to limit his own legacy. Architecture as a profession could not fully assimilate his lesson, and perhaps still has not done so.

# *Abbreviations*

B: see Bambach, ed., 2003
*Carteggio*: see Barocchi and Ristori, eds., 1965–83
Codex Ashburnham 361, Biblioteca Medicea Laurenziana, Florence: see Francesco di Giorgio
Codex Barberini, Barb. Lat. 4424, Biblioteca Apostolica Vaticana: see Huelsen, ed., 1910, repr. 1984
Codex Coner, Sir John Soane's Museum, London: see Ashby, ed., 1904
Codex Escurialensis 28-II-12, Biblioteca del Real Monasterio de San Lorenzo, El Escorial, Madrid: see Egger, ed., 1905; Fernández Gómez, ed., 2000
Codex Urbinas Latinus 1270, Biblioteca Apostolica Vaticana: see Leonardo da Vinci
*Corpus*: see Tolnay 1975–80
J: see Joannides 2007
P&G: see Pouncey and Gere 1962
P&P: see Popham and Pouncey 1950
Taccuino Senese S IV.8, Biblioteca Communale, Siena: see Falb, ed., 1902
Uffizi: Gabinetti Disegni e Stampe, Galleria degli Uffizi, Florence
W: see Wilde 1953a



# *Notes*

## *Introduction*

1 Napkin lore continues: an article on Frank Gehry's new computer science and artificial intelligence building for M.I.T. refers to Gehry's "first experimental drawings on M.I.T. napkins" and their careful preservation (Sara Rimer, "Putting a Rare Smile on Sober Science, Frank Gehry's Building Opens at M.I.T.," *New York Times*, 13 May 2004, pp. B1 and B6).

2 This is true even in the digital era: computer renderings are replacing the finely executed watercolor and the painstakingly drafted ink on Mylar line, but not as yet the sketch. Donald Greenberg, a pioneer in the field of computer-aided design at Cornell University, who spoke at the University of Virginia in spring 2001, responded in the negative to my direct question about whether he predicted that drawing would become obsolete. Carpo (2001, pp. 14–15) reflects on changes to architectural culture wrought by print technology, and possible parallels with the impact of computers on design; for the effect of digitization on design more broadly, see Carpo 2004.

3 Vasari, ed. Barocchi 1962, vol. 1, pp. 58–59, with extensive commentary in vol. 3, nn. 471–93, pp. 801–87. Vasari's phrase is discussed in the epilogue to this book.

4 Ackerman 1954a; Frommel and Adams, eds., 1994–2000, vol. 2, pp. 1–21.

5 For a full discussion, see Carpo 2001.

6 Ames-Lewis 1981, pp. 13–14; Ackerman 2002, pp. 27–66. On drawing practices in the Middle Ages, see Scheller, trans. Hoyle 1995; and on drawing in late medieval Siena, see Ladis 1995.

7 Villard de Honnecourt's portfolio, held in the Bibliothèque Nationale, Paris (MS. Fr. 19.093), is often referred to as a "sketchbook" but is far from it, being made up of carefully executed ink drawings on parchment; it is reproduced, with critical commentary in English, French, Spanish, and German editions; for a full bibliography of these editions, see Barnes 1982. The most thorough scholarly catalogue is found in the German edition, Hahnloser 1935. On the survival of full-scale drawings in stone at the Mausoleum of Augustus in Rome and other ancient sites, see Wilson-Jones 2000, pp. 49–59, with illustrations. For discussion of medieval drawings, see Ghisalberti in Millon, ed., 1994, pp. 427–30, Shelby, ed., 1977, Coldstream 1991, pp. 24–39, and Coldstream 2002, pp. 71–78. For facsimiles of Gothic drawings in the collection of prints and drawings of the Akademie der Bildenden Künste, Vienna, see Böker 2005; and on medieval and Renaissance drawings, see Elen 1995 and Ackerman 2002, pp. 28–65.

8 On the availability of paper in the fifteenth and sixteenth centuries, see Ames-Lewis 1981, repr. 2000, pp. 21–23.

9 Kleist, ed. and trans. Miller 1982. Originally published in 1804 as "Uber die allmähliche Verfertigung der Gedanken beim Reden," this essay appears in several German collections of Kleist's writings. Another appealing idea occurs in the opening paragraph: as a revision to the French expression *l'appétit vient en mangeant*, Kleist suggests, "l'idée vient en parlant" (p. 218). I would like to thank both Joanna Klink and Monica Shenouda for their help with this source.

10 For discussion of the clay models, see Goldscheider 1962, LeBrooy 1972, Ragionieri 2000, and Cole 2001; on Michelangelo's use of architectural models in general, see Mussolin 2006.

11 For consideration of many examples of this Renaissance practice, see Millon in Millon, ed., 1994, pp. 19–73.

12 Fusco 1982.

13 In his essay "Della architettura" Benvenuto Cellini offers an intriguing example of this attitude; writing about Peruzzi's studies of a broad array of antiquities, he reports Peruzzi's observation that Vitruvius had not been able to recognize the most beautiful monuments, because he was neither painter nor sculptor: "Vitruvio non aveva

scelto di queste belle maniere la più bello, si come quello non era né pittore né scultore" (Cellini, ed. Cordiè 1960, pp. 1110–11). Cellini goes on to elaborate that Peruzzi was able to make a selection of antiquities according to his good judgment as an excellent painter. For discussion of this passage, see Burns 1988, p. 211, and Clarke 1998.

14 "è stato il maggiore architetto che fussi mai, solo perché gli è stato il maggiore scultore ed il maggiore pittore": Cellini, ed. Cordié 1960, p. 1110.

15 Barocchi, ed., 1971–77, vol. 2, has many examples. The comparisons made between the arts (the *paragone*) can be seen in the responses to a query sent to various artists, including Michelangelo, by Benedetto Varchi in 1546 (Barocchi, ed., 1960, vol. 1, pp. 4–82, with Michelangelo's response on p. 82).

16 For example, see Dolce 1557, fol. 20v; Cellini 1568, facs. 1983, fols. 60v–61v; Francisco de Hollanda, trans. Bell 1928, p. 36; Doni 1549, pp. 8–9 and *passim*; and Vasari, preface to *Della pittura*, chaps. 15–16, pp. 111–21; see also Williams 1997, pp. 29–72, with extensive references to other sixteenth-century theorists of the term, including Doni, Armenini and Summers 1981, pp. 256–59).

17 "Mons[ignio]re reverendissimo, quando una pianta à diverse parte, tucte quelle che sono a un modo di qualità e quantità ànno a essere adorne in un medesimo modo e d'una medesima maniera; e similmenti i lor riscontri. Ma quando la pianta muta del tucto forma, è non solamente lecito, ma necessario, mutare del tucto ancora gli ador[na]menti, e similmente i lor riscontri; e e' mezzi sempre son liberi come vogliono; sì come il naso, che è nel mezzo del viso, non è obrigato né all'unto né a l'altro ochio, ma l'una mana è bene obrigata a esere come l'altra, e l'uno ochio come l'altro, per rispecto degli lati e de' riscontri. E per[ò] è cosa certa che le membra dell'architectura dipendono dale membra dell'uomo. Chi non è stato o non è buon maestro di figure, e masimo di notomia, non se ne può indendere." The letter was long known as the "Letter to an unknown prelate." The *Carteggio* (vol. 5, p. 123), however, identifies the prelate as Cardinal Rodolfo Pio da Carpi and dates the letter, with a question mark, to 1557–60. The translation from Summers 1981, p. 418, differs in one significant respect from that in Ackerman 1986, p. 37, with regard to the understanding of *i mezzi*; both authors thoroughly analyze the letter's meaning. For an interpretation in terms of its humor and irony, see Frings 1998, where it is also suggested that the letter is not to Cardinal Carpi but to Marcello Cervini.

18 This observation was suggested by Howard Burns in conversation.

19 Vitruvius, ed. Granger 1931, vol. I, Book I, pp. 26–27; Book VI, pp. 206–09 and in various other passages.

20 A few of Francesco di Giorgio's drawings of this kind include Codex Ashburnham 361, fol. 1r, 10v, 11r, 13v, 15r and v; for further examples, see chapter 2, n. 71.

21 Filarete makes many comments about analogies between man and building: see Filarete, ed. Spencer 1965, book 1, fols. 2v–6v, his remark about love occurs in book 2, fol. 8r.

22 Alberti, trans. Rykwert et al. 1988, Book V, pp. 147–48. In his preface on architecture, Vasari wrote of the façade: "Bisogna poi che rappresenti il corpo dell'uomo nel tutto e nelle parti similmente. [. . .] Per l'aspetto suo primo la facciata vuole avere decoro e maestà et essere compartita come la faccia dell'uomo: la porta da basso et in mez[z]o, così come nella testa ha l'uomo la bocca donde nel corpo passa ogni sorte di alimento; le finestre, per gli occhi, una di qua e l'altra di là, servando sempre parità, che non si faccia se non tanto di qua quanto di là negl'ornamenti o d'archi o colonne o pilastri o nicchie o finestre inginocchiate overo altra sorte d'ornamento, con le misure et ordini che già s'è ragionato, o dorici o ionici o corinti o toscani." The description of the interior of the palazzo continues with surprising and detailed anthropomorphic analogies: "Entrando dentro, nel primo ricetto sia magnifico et unitamente corrisponda all'appiccatura della gola. [. . .] Il cortile, figurato per il corpo, sia quadro et uguale, overo un quadro e mez[z]o come tutte le parti del corpo, e sia ordinato di porte e di parità di stanze dentro con belli ornamenti." After describing the stairs, which should be spacious and full of light, he specifies, "E si può dire che elle siano le braccia e le gambe di questo corpo, onde, sì come le bracce stanno dagli lati dell'uomo, così deono queste star dalle bande dell'edificio" (Vasari, ed. Barocchi 1966, vol. 1, pp. 79–80).

23 Greenblatt 1980.

24 Wallace (1994, p. 8) makes interesting comments regarding the use of the term "genius" in reference to Michelangelo. Much of the critique of the concept has come from feminist scholars.

25 For a thorough debunking of this view with regard to architecture, see Wallace 1994.

26 Another crucial figure for Michelangelo's architectural development was Donatello: see Summers 1972b and 1981, pp. 144–49. Since none of Donatello's drawings survive, I have chosen to focus mainly on comparisons with other draftsmen. Hemsoll (2003) has provided a corrective to the traditional, isolating view of Michelangelo, with regard to his projects at San Lorenzo.

27 References to Giuliano and his close association with Michelangelo occur throughout the *Carteggio* and in Vasari's biography. Vasari, ed. Barocchi 1966, vol. 6, p. 20 refers to Antonio and Giuliano's construction of a "castello di legname fortissimo" for the transportation of the statue of David as well as Giuliano's negotiation with Pope Julius II over Michelangelo's payment for the ceiling (p. 34) and Giuliano's intervention on behalf of Pope Julius II in persuading Michelangelo to finish the Sistine Ceiling despite technical difficulties (pp. 36–37). Perhaps the most significant testament to their friendship occurs in the context of the story told by Giuliano's son Francesco da Sangallo of Giuliano fetching Michelangelo upon the discovery of the Laocoön: "Che io era di pochi anni la prima volta ch'io fui a Roma, che fu detto al papa, che in una vigna presso a S. Maria Maggiore s'era trovato certe statue molto belle. Il papa commandò a un palafreniere: va, e dì a Giuliano da S. Gallo, che subito le vada a vedere. E così subito s'andò. E perchè Michelangelo Bonaroti si trovava continuamente in casa, che mio padre l'aveva fatto venire, e gli aveva allogata la sepoltura del papa; vole, che ancor lui andasse; ed io così in groppa a mio padre, e andammo. Scesi dove erano le statue: subito mio padre disse: questo è Laocoonte, di cui fa menzione Plinio. Si fece crescere la buca, per poterlo tirare fuori; e visto, ci tornammo a desinare: e sempre si ragionò delle cose antiche, discorrendo ancora di quelle di Fiorenze." Letter of 28 February 1567 to Reverendo Monsignor Spedalengo, published in Fea 1790, vol. 1, p. 329. The letter is mentioned in the *Carteggio*, vol. 1, p. 364. On the significance of the incident, see Barkan 1999, pp. 3–17, but note that he translates *desinare* as "to draw" rather than its correct meaning, "to lunch"; see also entry by Koortbojian in Payne et al., eds., 2000, pp. 199–216.

28 This is very close to a sentiment expressed by Paolo Cortesi in a heated exchange of letters with Poliziano that took place before 1490 (Poliziano, ed. Garin 1977, p. 904). Of course there were multiple debates about the finer points of imitation, for which an enormous literature exists. On architecture and imitation in particular, see Brothers 2000, pp. 83–86, Clarke 2003, pp. 65–73, and on literary imitation in general, Greene 1982.





29 Quint (1983) provides a broad discussion of originality in literature of the Renaissance starting with a reference to the story of Michelangelo's forgery of a sleeping Cupid, pp. 1–2.

30 Sohm (2001, pp. 90–97) discusses the relationship between repetition, habit, *maniera*, and style.

31 As Lieberman (1985, p. 571) has pointed out, a sense of familiarity and knowledge of an artist, architect, or his works can often blind the viewer to fundamental observations.

32 Few of Michelangelo's poems circulated within his lifetime. Michelangelo planned a publication of an edition of his poetry between 1542 and 1546, but it was never realized; the first publication was edited by Michelangelo the Younger in 1623 (Saslow 1991, p. 53). At least seven of his poems were published during his lifetime (Ryan 1998, pp. 3–4).

33 Millon and Hugh Smyth 1988; Michael Hirst's concise and magisterial book, *Michelangelo and his Drawings* (Hirst 1998a), considers the whole of Michelangelo's production as a draftsman from the point of view of function, method, and appearance. The fundamental study for all discussions of Michelangelo's architecture for over four decades has been James Ackerman's *The Architecture of Michelangelo* (2 vols., 1961; abridged 1 vol. edition, 1986). Other comprehensive studies include Argan and Contardi 1990 and Nova 1984.

34 To name only a few examples: Wallace 1994; Hatfield 2002; Gouwens and Reiss eds., 2005.

35 Riffaterre 1978. Of course this is a gross oversimplification of a subtle and multi-layered argument.

36 For interesting comments about these issues, see Bois 1990, pp. xi–xxx.

37 Rosand (2002, pp. xxi–xxiii and pp. 1–23) presents an insightful discussion of the legacy of connoisseurship.

38 This perception is tellingly at odds, however, with that of many museum curators and directors; for some relevant remarks, see Cuno, ed., 2004.

## 1 *Drawing, Memory, and Invention*

1 Ludovico Ariosto is generally credited as the first to refer to "Michel [. . .], Angelo divino," in Canto 33, 2, of his epic poem *Orlando furioso*, published between 1516 and 1532 (Ariosto, ed. Caretti, 1966, repr. 1992, vol. 2, p. 984). Stephen Campbell, however, has pointed out that there were in fact earlier uses of *divino* to characterize artists (Campbell 2002, pp. 596–98). It is repeated by many authors, including Dolce 1577, fol. 5v (in Barocchi, ed., 1960, vol. 1), Aretino (*Carteggio*, vol. 4, p. 82), and Doni (*Carteggio*, vol. 4, p. 163).

2 On *sprezzatura*, see Berger 2002, pp. 295–307; and in relation to Michelangelo, Clements 1961, pp. 63–66, Sohm 2001, pp. 161–62 and p. 264, n. 99.

3 In a letter to Benedetto Varchi, Pontormo wrote, "una cosa sola c'è che è nobile, che è el suo fondamento, e questo si è el disegno, e tutte quante l'altre ragioni sono debole, rispetto a questo (vedetelo che chiunche ha questo, fa l'una e l'altra bene)": Varchi 1549, p. 132; Barocchi, ed. 1960, vol. 1, p. 504. Giovan Battista Armenini wrote, "Gli Huomoni intelligenti di queste nobili arti, che più delle altre arti si trovano essere unite insieme, i quali sono i Pittori, gli Scultori, et gli Architetti; si sono sforzati tutti di voler dare la sua diffinitione al Dissegno, si come quello ch'è il lume, il fondamento, & il sostegno delle predette arti, nè si sono curati essere stati varii fra essi, poiche tutti tendono à un fine" (Armenini 1587, repr. 1971, p. 37). According to Anton Francesco Doni, "per fare il fondamento buono mi pare che bisogni mostrarti che la Pittura et la Scoltura no[n] si possono mettere in opera senza il disegno del quale puo malamente dar l'Arte la sua sentenza" (Doni 1549, fol. 7r). For discussion of additional sources, see Summers 1981, pp. 254–61; Rosand 2002, pp. 24–60; and Jacobs 2002, pp. 434–35. See also references in introduction, n. 16, above.

4 Francisco de Hollanda, trans. Bell 1928, p. 68 (I have modified the translation slightly so that "the root of all science" is rendered "the root of all knowledge"). Scholars have disagreed about Francisco's reliability; see Summers 1981, pp. 26–27 with bibliography.

5 Gombrich (1966, p. 61) discusses the implications of this approach, writing in reference to Leonardo's preference for the indeterminate: "The reversal of workshop standards is complete. The sketch is no longer the preparation for a particular work, but is part of a process which is constantly going on in the artist's mind; instead of fixing the flow of imagination it keeps it in flux." Heydenreich (1972, repr. 1988, p. 157), also recognizes this quality of Leonardo's drawings, as do Ames-Lewis 1981, pp. 178–80, and Rosand 2002, pp. 50–54, 61–111.

6 Weil-Garris Posner (1974, pp. 31–35) discusses Leonardo's profound impact on Michelangelo, particularly in reference to the Medici Chapel.

7 For a compilation of various fifteenth- and sixteenth-century writings on artistic invention, see Barocchi, ed., 1971–77, vol. 3, pp. 2403–620.

8 Lomazzo 1585, fol. 109: "Egliè ben vero che quelli ancora che hanno l'inventione, per il più non possono dall'altra parte havere la patienza dell'operare come gl'altri. Il che per altro non adviene che per le continue inve[n]tioni, & capricci che gl'assalgono, per il che appena haveranno dilineato un corpo, & formato un'gesto che gli ne nascono nella fantasia altri infiniti d'altra sorte si che non possono per l'estremo diletto che sentono de l'inventione haver patienza di finere alcuna opera cominciata;" trans. Summers 1981, p. 70.

9 Cennini, ed. Torresi 2004, pp. 63–64 (the earliest manuscript copy of Cennini's *Libro dell'arte* is dated 1437). On Cennini's notion of *fantasia*, see Summers 1981, pp. 133–34.

10 "Vide quam mirum in membra redegit." For a detailed discussion of the drawing, and the theory that it was made from a sculpted model, see Wright 2005, pp. 151, 158–62.

11 Ghirlandaio's use of black chalk can be seen in a drawing of a standing woman (Chatsworth, inv. 316); for illustration and discussion, see Cadogan 2000, fig. 145, p. 139, and pp. 291–92.

12 Petrioli Tofani 1992, p. 68. On Signorelli's use of black chalk, see Van Cleave 1994 and 1998.

13 Hirst 1988a, pp. 5–7.

14 Scholars and conservators agree that red and black chalk have distinctive characteristics, but there is no consensus about the nature of these features. The great range of qualities that can be observed in both red and black chalk makes distinguishing one from the other particularly problematic. The original sources for the chalks have long since disappeared, and the current varieties are synthetically produced (Meder 1919 and 1978; Oberhuber 1992; Petrioli Tofani 1991; Cohn 1987; McGrath 1997 and 2000). Cellini recommends red and black chalk (which he discusses together) over all other methods of drawing, particularly for drawing from life, because of the ease of revision; he also describes a specific technique for erasing chalk lines, using bread soaked in water: "Altrimenti si disegna con una pietra rossa e nera, la quale viene di ponente; questa s'è trovata a' tempi nostri, il nome suo si domanda lapis amatita. Questo modo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CAMMY BROTHERS

YALE UNIVERSITY PRESS
NEW HAVEN *and* LONDON

PUBLISHED WITH THE ASSISTANCE OF THE GETTY FOUNDATION
AND THE LILA ACHESON WALLACE – READER'S DIGEST PUBLICATIONS SUBSIDY
AT VILLA I TATTI



Designed by Emily Lees

Printed in Singapore

**Library of Congress Cataloging-in-Publication Data**

Brothers, Cammy, 1969–
Michelangelo, drawing, and the invention of architecture / Cammy Brothers.
p. cm.
Includes bibliographical references and index.
ISBN 978–0–300–12489–7 (cl : alk. paper)
1. Michelangelo Buonarroti, 1475–1564—Criticism and interpretation.
2. Architectural drawing—Italy—16th century. I. Title.
NA2707.B78B76 2007
720.92—dc22
2007014688

**A catalogue record for this book is available from The British Library**

*Endpapers*: Study of four figures, Musée Condé, Chantilly (detail of fig. 108)
*Half title*: Study for the Porta Pia, Casa Buonarroti, Florence (detail of fig. 274)
*Frontispiece*: Fortification study, Casa Buonarroti, Florence (detail of fig. 250)
*Image on p. v*: San Giovanni dei Fiorentini, Casa Buonarrioti, Florence (detail of fig. 272)

*To Howard Burns, and to the Memory of John Shearman*