



LEONARDO DA VINCI

REDISCOVERED

IN FOUR VOLUMES

CARMEN C. BAMBACH



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FACING PAGE Enlarged detail of Leonardo's study for the head of the Virgin, ca. 1510–15. New York, Metropolitan Museum of Art 51.90 (Harris Brisbane Dick Fund, 1951)





RECUPERATING LEONARDO'S LEGACY

He was so unique and universal, that it could be said he was a miracle of nature.

Fu tanto raro et uniuersale, che dalla natura per suo miracolo essere prodotto dire si puote.

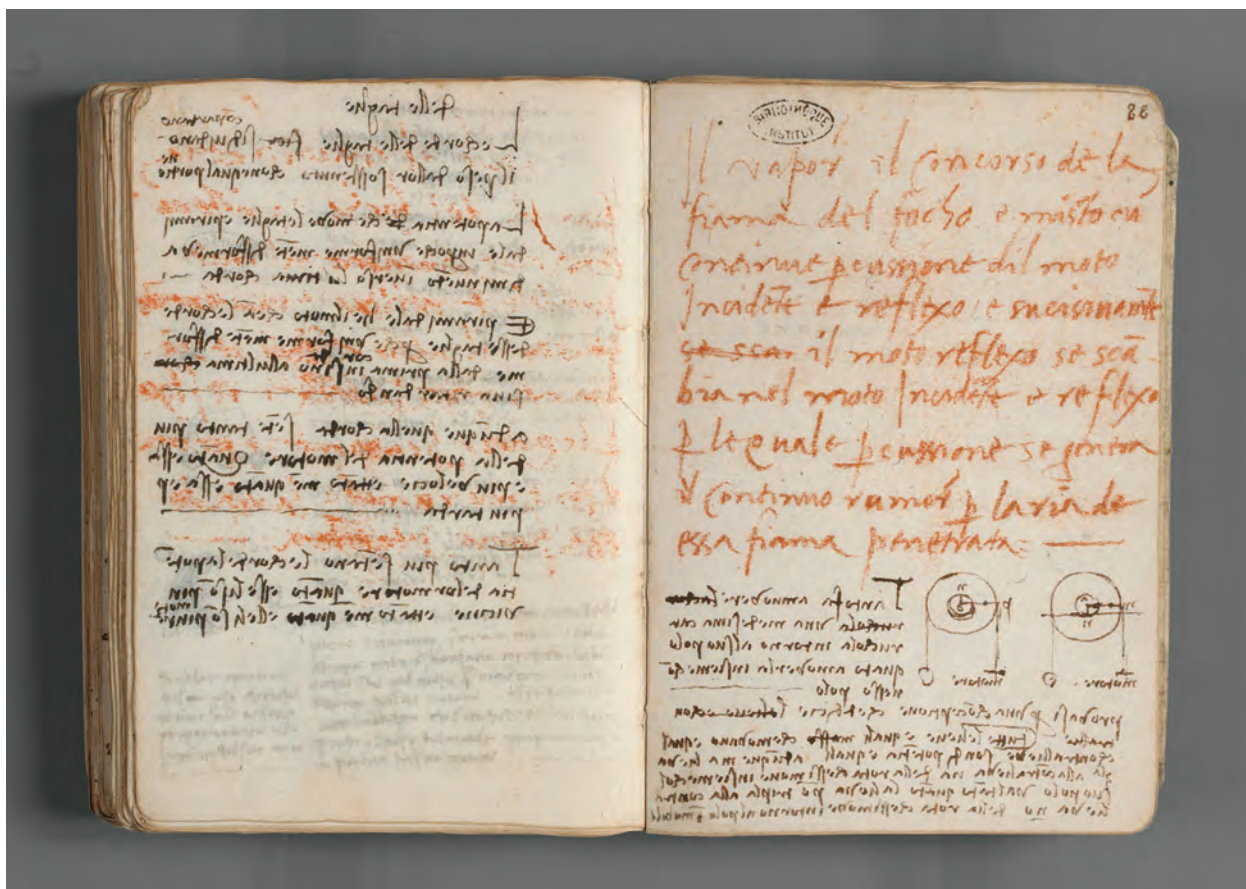
Anonymous Florentine author, Codex Magliabechiano, ca. 1540

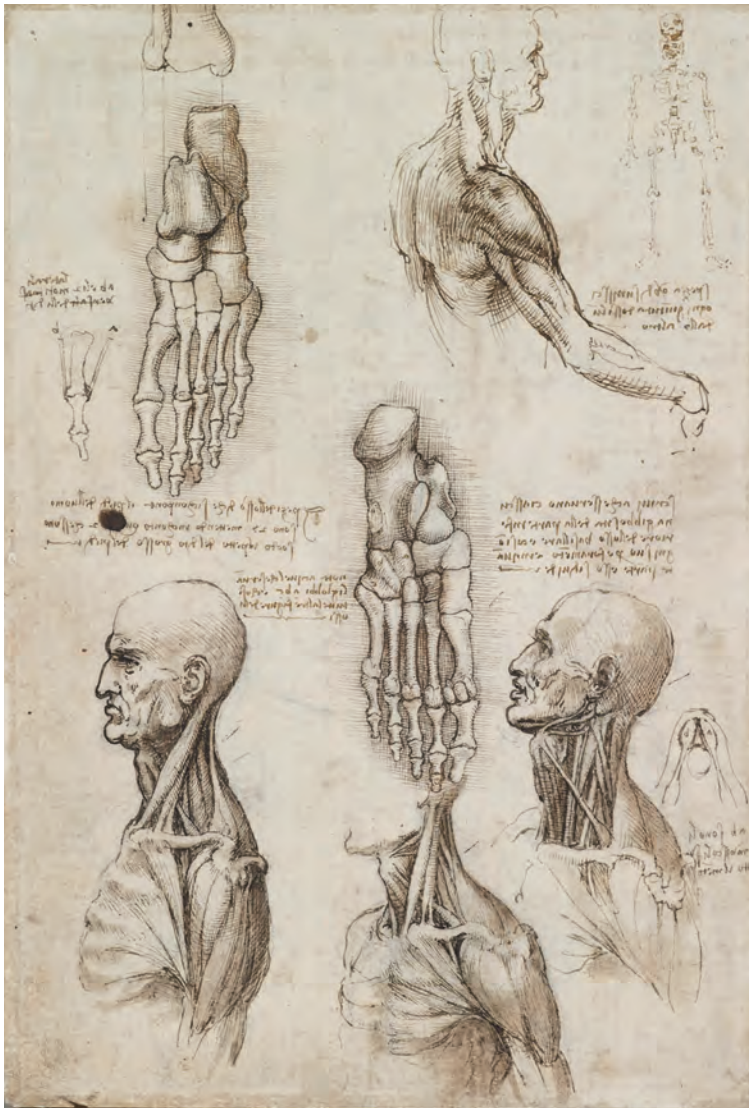
FEW ARTISTS HAVE CAPTIVATED the imagination of the general public as widely as has Leonardo. The photographs of President and Mrs. John F. Kennedy posing with the *Monna Lisa* in 1963, when, in an unprecedented act of diplomacy, Leonardo's painting traveled across the Atlantic for a solo exhibition in Washington and New York,¹ illustrate the power of Leonardo's legend and of this painting in particular. But the appreciation of Leonardo and the *Monna Lisa* was not continuous throughout history, and was not unanimous even within the half century following the great master's death. His biographer Giorgio Vasari, never having seen the original picture, which was already in the French royal collection (since 1518, or thereabouts) at the Château de Fontainebleau, praised it in 1568, "and it can truly be said that this [portrait] was painted in such a manner as to make every good artist, whoever he

may be, tremble and lose heart" ("e nel vero si può dire che questa fusti dipinta d'una maniera da far tremare e temere ogni gagliardo artefice, e sia qual si vuole").² After having seen it in person in 1573–74, during his trip to France,³ Federico Zuccaro condemned it as "dry and lacking in good taste, it is to be avoided" ("secha e di poco gusto e da fugirla").⁴ Leonardo was famous, mainly as an artist, until late in the seventeenth century.

For nineteenth- and early twentieth-century historians especially, Leonardo became the paradigm of the Renaissance polymath, ahead of his time ("he was a man who awoke too early in the darkness, while the others were asleep," noted Sigmund Freud, quoting Dmitri Merejkowski⁵). He was the elusive artist, who produced beautiful, mythical paintings; the theorist, scientist, and inventor whose mind often defied convention. Much of Leonardo's work seems to speak across the centuries with a timeless, astonishingly modern voice. Yet how can one look at his towering legacy with a fresh and historically accurate eye?

FACING PAGE Detail of Leonardo's presumed self-portrait, ca. 1500–2. Turin, Biblioteca Reale Dis. Ital. I/30, 15571 DC.





1 (FACING PAGE, TOP) Leonardo, Paris MS G, fols. 84r–83v, ca. 1510–11 and 1514–15, on the construction of the *ignia* (concave burning mirror). At right, the machine for profiling with calculations; at left, notes and two alternative designs for the profiler, operated by rollers connected to belts that communicate motion to the movable parts. Pen and different colors of brown ink, over traces of black chalk underdrawing, 14.1 x 19.3 cm, open spread of leaves (approximate dimensions). Paris, Bibliothèque de l'Institut de France 2178.

2 (FACING PAGE, BOTTOM) Leonardo, Paris MS G, fols. 88r–87v, ca. 1510–11 and 1514–15. At right, a note on vapor and the concourse of fire written by Giovan Francesco Melzi after Leonardo, autograph notes on the motion of pulleys (“*taglie*”) and demonstrations of the actions of a lever (“*polo*”); at left, on the power and motion of pulleys. Red chalk, pen and two different colors of brown ink (red chalk offset on the left leaf), 13.9 x 19.3 cm, open spread of leaves (approximate dimensions). Paris, Bibliothèque de l'Institut de France 2178.



3 (ABOVE, LEFT) Leonardo, the bones of the foot; the muscles of the neck, shoulder, and arm, with notes (verso), winter of 1510 or 1511. Pen and different hues of brown ink (some outlines of drawings reinforced with a pen with a slightly thicker nib), brush and brown wash, over black chalk, 29 x 19.6 cm. From the Anatomical MS A, fol. 3v. Windsor Castle, Royal Library 19002v.

4 (ABOVE, RIGHT) Leonardo, the bones and soft tissue of the throat; external view of the muscles of the leg of a man, with notes (recto), winter of 1510 or 1511. Pen and different hues of brown ink (some outlines of drawings reinforced with a pen with a slightly thicker nib), brush and brown wash, over black chalk; the notes written with pens with nibs of slightly different thickness, 29 x 19.6 cm. From the Anatomical MS A, fol. 3r. Windsor Castle, Royal Library 19002r.

Handwritten text at the top left, likely a title or introductory note.

Handwritten text at the top right, possibly a subtitle or reference.

Handwritten text block in the upper left quadrant.



Handwritten text block to the right of the large curved structure.

Handwritten text block in the upper middle section.



Handwritten text block in the middle right area.



Handwritten text block to the right of the small fetus drawing.

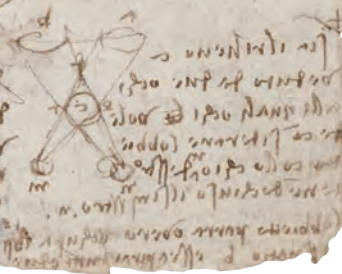
Handwritten text block in the lower left quadrant.

Large block of handwritten text in the lower left, continuing the notes.



Handwritten text block in the lower middle section.

Handwritten text block in the lower right quadrant.



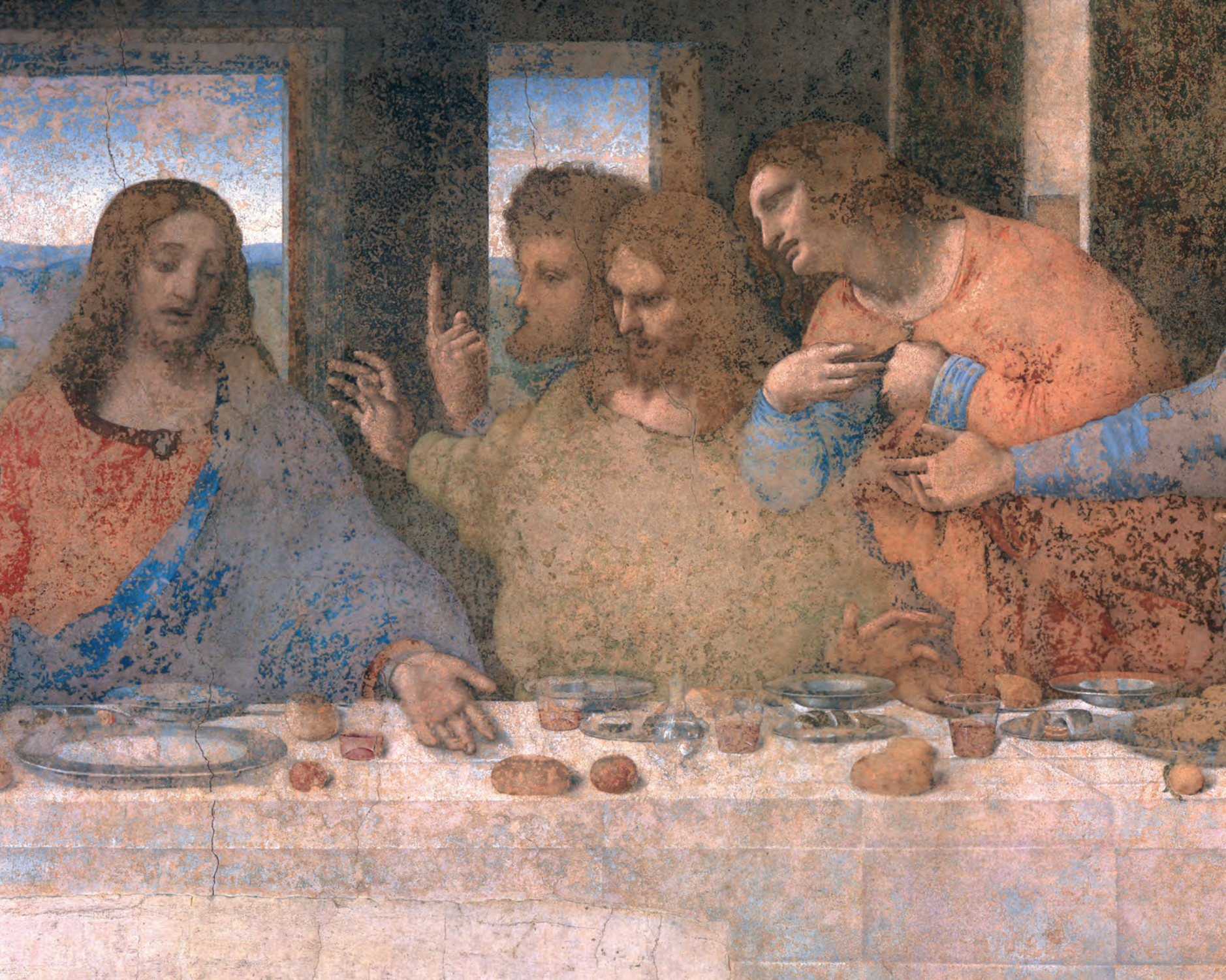


5 (FACING PAGE) Leonardo, the human fetus in utero; blown-up details of the cotyledons (the lobules of a mammalian placenta, but which are not present in a human embryo), partly based on animal dissection; analytical diagram of weight within a sphere; diagram explaining binocular vision, with extensive notes added in separate campaigns of work (recto), ca. 1510–11. Pens with nibs of different thickness and different hues of brown ink, with underdrawing and overdrawing by the artist in red chalk (the fetus in the main design); a number of stitch holes along the right border of the sheet, 30.1 x 21.5 cm (maximum: very irregular borders). From the Anatomical MS C.III, fol. 8r. Windsor Castle, Royal Library 19102r.

6 (ABOVE) Leonardo, botanical studies: a spray of dyer's greenweed (*Genista tinctoria*) and a spray of oak leaves with a cluster of acorns (recto), ca. 1505–9. Red chalk, highlighted with brush and white gouache in some areas, on pale red ocher prepared paper, 18.8 x 15.4 cm. Windsor Castle, Royal Library 12422r.







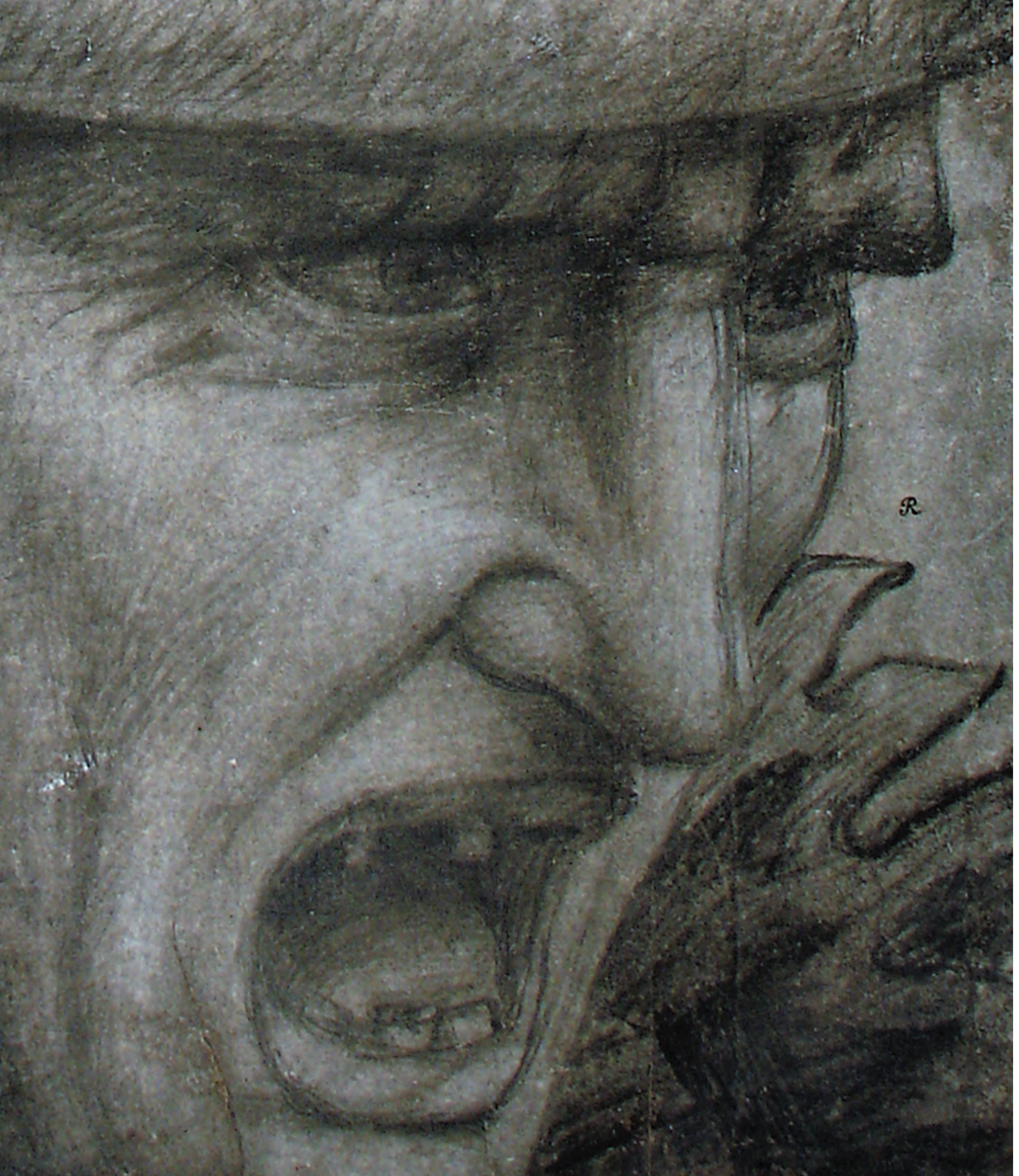
7 (PAGE 8) Leonardo, studies of the arms and hands of a woman (for *Ginevra de' Benici*?), ca. 1474–85. At upper left is a small, unrelated sketch of the head of a somewhat grotesque man in profile view. Metalpoint of two types (silverpoint and leadpoint?), highlighted with brush and white gouache, with outlines later overdrawn in charcoal or soft, grayish-black chalk by the artist, on pinkish-buff prepared paper, 21.5 × 15 cm. Windsor Castle, Royal Library 12558r.

8 (PREVIOUS PAGE) Detail of pl. 7.39: Leonardo, *Mona Lisa*. Oil on poplar wood. Paris, Musée du Louvre, Département des Peintures 779.

9 (ABOVE) Detail of pl. 4.60: Leonardo, Christ and the apostles Thomas, James the Greater, and Philip in the *Last Supper*. *Tempera grassa* and oil on plaster. Milan, Refectory of Santa Maria delle Grazie.

10 (FACING PAGE) Leonardo, man in bust-length, three-quarter view, with a sketch of his left hand (study relating to the apostle James in the *Last Supper*); designs for the upper stories and corner domed tower of a castle in bird's-eye view and in plan (recto), ca. 1495–98. Pen and brown ink, red chalk, 25.2 × 17.2 cm. Windsor Castle, Royal Library 12552r Royal Collection Trust/© Her Majesty Queen Elizabeth II 2016.







12 (ABOVE) Leonardo, study for the *Battle of Anghiari*: two heads of screaming soldiers, that at left identifiable as the *condottiere* Niccolò Piccinino, ca. 1504–5. Soft black chalk; some traces of red chalk on left, 19.2 x 18.8 cm. Budapest, Szépművészeti Múzeum 1775.

11 (FACING PAGE) Detail of pl. 8.67, imaged in infrared reflectography. It reveals the outline of *spolvero* dots resulting from the transfer of the design that enabled the full-scale copy after Leonardo's cartoon for Niccolò Piccinino. Oxford, Ashmolean Museum of Art and Archaeology Oxford University WA 1863.618 (KP II 20); bequeathed by Francis Douce, 1834, and transferred from the Bodleian Library, 1863.

The *Monna Lisa* offers an authentic document of his process of design, almost untarnished by the popular imagination, in the underdrawing and underlying layers of modeling revealed by means of a sophisticated protocol of imaging with infrared reflectography combined with other techniques. The major findings during non-invasive scientific examinations of the picture by the C2RMF (Paris) were published in 2006 and 2014 (see pls. 7.40–7.39).⁶ In exposing a painting to electromagnetic waves in the infrared band of the spectrum, which are slightly longer than those of visible light, some waves can penetrate through the upper surface, while others are absorbed and reflected off the underlying layers. The initial stages of a



13 Sixteenth-century artist after Leonardo, full-scale copy of the head of a soldier, the *condottiere* Niccolò Piccinino, in the *Fight for the Standard*, ca. 1504–5 and later. Black chalk, 50.5 x 37.5 cm (maximum). Oxford, Ashmolean Museum of Art and Archaeology Oxford University WA 1863.618 (KP II 20); bequeathed by Francis Douce, 1834, and transferred from the Bodleian Library, 1863.

composition, particularly if containing traces of carbon in the design, can be detected with the aid of special infrared-sensitive cameras, permitting one to see differences in the absorption of infrared light by the underlying layers, as if some pigments were transparent.⁷ The underdrawing in the *Monna Lisa* (see pl. 7.40) especially suggests the quality of “work in progress” in the design of the painting. The earliest outlines on the surface of the primed poplar wood panel depict the slender overall proportions of the underdrawn figure (especially in the arms), beneath the voluminous draperies, much closer to a late fifteenth-century, Florentine ideal. It is the raw state of primary evidence, of creative acts on paper or below the picture



14 Leonardo, fragmentary study of a striding horse (probably after an antique sculpture), ca. 1490. Pen and dark brown ink, over faint traces of leadpoint or black chalk, on off-white paper now darkened to a light brown hue, with accidental stains of paint, ink, and wash, 16.7 × 10.3 cm; glued onto secondary paper support (maximum original sheet: irregular borders). Milan, Veneranda Biblioteca Ambrosiana Cod. F. 263 Inf. 91.

surface, that can often provide the ground for historical reassessments.

As most specialists would agree, Leonardo's drawings and manuscripts shed daylight upon his work. But more general authors of elegantly written studies of the critical reception and historiography of Leonardo's career have all too frequently failed

to capitalize on the rich evidence of his vast corpus of drawings and notes in such investigations.⁸

The basic framework of this four-volume book is biographical. It is the kind of larger reconstruction that seeks to render an integrated portrait of Leonardo's life, personality, and career, that keeps in pace with the development of his thought, close-up and step-by-step. My aim has been to achieve a greater immediacy than has been previously attempted, without sacrificing historical authenticity. In choosing a biographical structure, I have particularly emphasized process – the “becoming” of Leonardo – searching to capture his work as an artist and thinker in the unfolding of his career, and noting in some detail his gradual self-making as an author. Another revelatory, at times fascinating dimension of his biography is the *dramatis personae* – the patrons, intermediaries, family members, friends, pupils, assistants, intellectual and artistic collaborators. As will be seen throughout this narrative, a surprising number of connections have emerged in this respect (and no doubt will continue to emerge), since, with some archival digging, it has become clear that certain figures entered the stage of Leonardo's activity much before the time in which they became professionally relevant for him in a significant way. In these, and other respects, the asking of different questions about the evidence and the wider exploration of methods of analysis can, and should open the door for future rediscoveries.

I begin this reassessment of Leonardo's life, work, and legacy by focusing sustained attention on what must be the most precious body of evidence that could be mined by the historian, but potentially also the most severely misunderstood – his drawings and manuscripts. A sensitive, contextualized analysis of the artist's drawings and manuscripts requires a fair amount of historical, documentary, and archaeological reconstruction. This chapter is largely dedicated to this complex, but necessary level of excavation. For, were Leonardo's production on paper not to exist, posterity would simply not know of his multi-faceted genius and the totality of his career and vision. His legacy on paper also offers the surprising glimpses that manage to humanize his genius, while revealing the arresting and undeniable distance that separates him from his contemporaries and the modern viewer. His legacy on paper enables one to assess Leonardo as a figure of his time – fully aware of contemporary art and thought, while constantly reworking his sources – as well as a figure who justly transcends his time.





The Largest Extant *Oeuvre* on Paper by an Early Artist

Leonardo's production on paper constitutes an absolutely staggering legacy, since nearly 4,100 sheets with drawings, fragments, and manuscript notes (usually accompanied by sketches) by him have survived.⁹ Of this material, a disproportionately large number of sheets date from the last two decades of his life. While this is not in itself unexpected, since late drawings by Renaissance artists tend to be more abundantly preserved than early work, there is an additional explanation: he was fortunate

15 Leonardo, a rider on a rearing horse trampling on a fallen foe, study for the Sforza monument (recto), ca. 1484–88. Metalpoint, on blue prepared paper, 15.1 × 18.8 cm. Windsor Castle, Royal Library 12358r.

to find a diligent curator of his legacy in his devoted, unfathomably patient pupil and artistic heir, Giovan Francesco Melzi (1491/93–ca. 1570), also the transcriber of his manuscripts, who entered the master's life and household late on, around 1506–8.¹⁰ Melzi is the relatively unsung hero in the story of the preservation of Leonardo's work. Even though what has survived must



16 (ABOVE, LEFT) Leonardo, young woman standing in a landscape (*Pointing Lady*; recto), ca. 1515–17. Black chalk (some brush with some brown wash in shadows?), 21 × 13.5 cm. Windsor Castle, Royal Library 12581r.



17 (ABOVE, RIGHT) Leonardo, a standing masquerader in the costume of a pikeman (recto), ca. 1517–18. Soft black chalk, partly reworked by the artist in pen and brown ink, brush and wash, on light tan paper with coarse fibers, 27.3 × 18.3 cm. Windsor Castle, Royal Library 12575r.

18 (FACING PAGE) Detail of pl. 12.37: Leonardo, study of a cataclysmic deluge with storm clouds, cataracts, and whirlpools over a landscape. Black chalk. Windsor Castle, Royal Library 12382r.

represent only a fraction of Leonardo's total output, the quantity remains vast.¹¹ As a point of comparison, one may recall that the extant *œuvre* of drawings by even such a highly prolific sixteenth-century Italian draftsman as Parmigianino (1503–1540) (who, like Leonardo, was a notoriously dilatory painter) adds up to no more than 1,000 sheets.¹² Or, one may wish to invoke the contrasting example of Michelangelo (1475–1564), who was Leonardo's great artistic rival around 1503–8,¹³ and to whom a little more than 600 extant sheets of drawings have been attributed by some scholars.¹⁴ Fifteenth-century artists have left considerably fewer drawings. The total corpus by the most prodigious fifteenth-century draftsmen, Pisanello (?1395–1455) and Filippino Lippi (1457/58–1504), approaches at most 200 to 300 sheets apiece.¹⁵

