

# The Genealogy of Leonardo's Shadows in a Drapery Drawing

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In the early 1470s Leonardo drew a kneeling figure dressed in heavy fabric on a red prepared paper sheet, following, at least apparently, the practice for the composition and modeling of drapery he had learned in the workshop of his master Andrea del Verrocchio (1435–1488) (Fig. 1). The drawing, which is often identified as ‘the Corsini drawing’, after its provenance from the Corsini collection, and whose attribution to Leonardo da Vinci (1452–1519) has never been questioned, is generally regarded as a preparatory drapery study for a painting and is often compared to similar studies painted in tempera on prepared linen variously attributed to Verrocchio, Domenico Ghirlandaio, Lorenzo di Credi, and Leonardo (Figs. 2, 3). This comparison remains instructive in elucidating the purpose and artistic context of the Corsini drawing, but disregards its physical characteristics, which differ from the linen studies in terms of support, coloring, and drawing techniques. More importantly, it ignores the different system of modeling that Leonardo adopted in the Corsini drawing and that has since become common in artistic practice. A fresh examination reveals that Leonardo created the Corsini drawing as a self-conscious demonstration piece on the genealogy of his shadows.

The Corsini drawing is a feast of graphic techniques.<sup>1</sup> Leonardo tinted the entire surface of the paper with a cinnabar-red color, which he must

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1. The sheet belonged to Cardinal Neri Maria Corsini (1685–1770), who kept it in a volume (signature 157 G 6) containing drawings acquired from Cardinal Filippo Antonio Gualtieri (1660–1728) and Francesco Maria de’ Medici (1660–1711). Owned by the Accademia dei Lincei, it is kept at the Gabinetto Nazionale delle Stampe, Istituto Nazionale per la Grafica, Palazzo Poli, Rome (no. FC 125770). On this drawing, see *Léonard de Vinci: Les études de draperie*, ed. FRANÇOISE VIATTE, exh. cat., Paris, Musée du Louvre 1989, pp. 76–77 (with bibliography); DAVID A. BROWN, *Leonardo da Vinci*:

have applied homogeneously with a large brush. The red color provides a unified optical base to the drawing, but it also renders the surface more receptive to the transfer of particles from the metal point to the paper, a fact that is crucial for drawing in silverpoint. It has not been conclusively established what kind of metal point Leonardo used, but the ductus and gray color of the strokes and their excellent state of preservation strongly suggest that he drew in silverpoint. A more challenging technique than lead point since its marks cannot be erased, silverpoint requires a firmer hand, a more advanced mastery of composition, and a highly developed visual sense for placing figures spatially and in motion. Because corrections in silverpoint remain always visible, artists followed Cennini's instructions and used it only to select the final outline of a figure, which Cennini recommended should be drawn first with a thin chalk so that mistakes might still be erased with a soft feather. Not so Leonardo. In silverpoint he drew directly both the outline of the drapery, which he marked with secure strokes, and the shadows, which he defined through the repetition of regular, finely spaced, parallel lines, which, characteristically, he traced from bottom right to top left.<sup>2</sup> To soften the edges of the fabric, create blurred shadows, and suggest movement, he combined the shadows in silverpoint with delicate marks in black chalk, which are particularly visible on the drawing's right

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*Origins of a Genius*, New Haven and London 1998, pp. 76–79; *Léonard de Vinci: Dessins et manuscrits*, ed. FRANÇOISE VIATTE and VARENA FORCIONE, exh. cat., Paris, Musée du Louvre 2003, pp. 52–70; CARMEN BAMBACH, "Leonardo and Drapery Studies on *tela sottilissima di lino*", *Apollo*, CLIX, 2004, pp. 44–55; *La collezione del principe da Leonardo a Goya. Disegni e stampe della raccolta Corsini*, ed. EBE ANTETOMASO and GINEVRA MARIANI, Rome 2004, pp. 294–295 (with bibliography). On Leonardo's invention of drapery studies, see GIORGIO VASARI, *The Lives of the Painters, Sculptors and Architects*, trans. GASTON DU C. DE VERE, ed. DAVID EKSERDJIAN, I, New York 1996, pp. 625–650. For broad consideration of drapery and folds, see GILLES DELEUZE, *The Fold: Leibniz and the Baroque*, Minneapolis 1993; and GEORGES DIDI-HUBERMAN, *Ninfa moderna: Essai sur le drapé tombé*, Paris 2002.

2. On Leonardo's drawing techniques, see FRANCIS AMES-LEWIS, *La matita nera nella pratica del disegno di Leonardo da Vinci. XLI lettura vinciana*, Florence 2002, which, however, does not consider the mixed technique of silverpoint and black chalk that Leonardo used in the Corsini drawing; DAVID ROSAND, *Drawing Acts: Studies in Graphic Expression and Representation*, Cambridge and New York 2002, pp. 62–97, especially on his early drawings; CARMEN BAMBACH, "Leonardo, Left-handed Draftsman and Writer", in *Leonardo da Vinci Master Draftsman*, ed. CARMEN BAMBACH, exh. cat., New York, The Metropolitan Museum of Art 2003, pp. 31–57.

side. As was common in Florentine artistic practice, he marked highlights with white gouache, using it predominantly in the folds over the bended knee and on the floor, but progressively abandoned it as he drew from left to right. The lack of white highlights in half the drawing has often been taken as an indication that Leonardo never completed it.

Leonardo's exploration of various positions for the figure's upper body has been considered a further sign that the drawing is unfinished. Four different profiles overlap one another, each with a slightly changed turn of the head, while the bend of the upper torso shows minimal but significant variations, and the arms are studied either stretched out or folded close to the bust. The rhythmic repetition of the contour of the torso and head through exploratory sketches, together with the blended rubbing of the black chalk line around the figure's waist, vividly suggest a figure in motion that turns minimally but unmistakably from a profile into an oblique view to acknowledge the viewer. In later years, Leonardo would have selected one of such multiple, rapidly sketched, silverpoint compositions by tracing it over with pen and ink, but no such reworking is present in the Corsini drawing, a fact that seems to undermine its interpretation as a preparatory sketch for an identifiable figure of a specific work. Indeed, no surviving painting or sculpture corresponds exactly to the Corsini drawing, although its influence is evident in figures of angels, saints, or the Virgin painted by Leonardo and others in the orbit of Verrocchio's workshop. The kneeling position of the figure is typical of Gabriel, recalling, in reverse, the angel of Leonardo's *Annunciation* in the Galleria degli Uffizi in Florence (ca. 1475) or of the small Louvre *Annunciation*, generally attributed to Lorenzo di Credi. It could also be adapted as the kneeling figure of a saint, as in Domenico Ghirlandaio's San Giusto altarpiece of the early 1480s (Galleria degli Uffizi, Florence). Nevertheless, the drawn figure, with folds adjusted around a prominent abdomen, might well be a study for the Virgin, unconventionally kneeling at the announcement of her miraculous pregnancy.

To evaluate fully the context of the Corsini drawing and its perceived purpose as a preparatory drawing, it is instructive to compare it with the drapery studies painted in tempera on prepared linen.<sup>3</sup> These monochrome

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3. The main examinations of the linen drapery studies are: GIGETTA DALI REGOLI, "Il 'piegar de' panni'", *Critica d'Arte*, XXI, 1976, pp. 35–48; JEAN K. CADOGAN, "Linen

studies, representing half figures in different positions – kneeling, seated, or standing, in profile or frontally – document a common artistic practice of fifteenth-century Florentine workshops reported also by Antonio Filarete and Giorgio Vasari: the use of mannequins in either wood or wax, dressed in real cloth that was hardened with glue or clay to set the folds permanently, for the production of studies after nature. As these linen studies document, the study after nature focused primarily on the detailed representation of light effects on folds, downplaying the larger context of the composition and the figure's full body, as well as the artist's individual manner, but emphasizing instead texture of the drapery through the use of linen cloth as the drawing's physical support. Undoubtedly, the Corsini drawing emerged from a similar practice and the stiff torso of its figure might recall the use of a wooden mannequin.

The authorship of the linen drapery studies is still hotly debated, although their impersonal style, which scholars have always singled out and which is markedly different from Leonardo's in the Corsini drawing, seems to defy individual attributions and favor instead their interpretation as the result of shared research. Furthermore, it is becoming increasingly clear that, as a group, the linen drapery studies might have appeared originally even more homogeneous than they do today. Ten of them are painted on the exact same linen cloth. Fourteen studies share a common provenance from the collection of Everard Jabach (1618–1695) and were substantially retouched in the seventeenth century: arms, busts, and heads were added with quick brush strokes in black tempera to give context and body structure to isolated draperies, while highlights were reinforced with the generous application of white wash on the crests of folds. These details, which we now know were added later, suddenly stand out for their incongruity with the original drawings, as the comparison of the

drapery study in the Uffizi (Fig. 2) with the one in the Louvre (Fig. 3) clearly shows, forcing a broader reconsideration of attributions.<sup>4</sup>

Leaving aside for the moment issues of authorship, a growing scholarly consensus is emerging on their common origin within Verrocchio's workshop. In his *Lives* Vasari specifically attributed the invention of drawing drapery studies in tempera on prepared linen to the young Leonardo when he was an apprentice in Verrocchio's workshop.<sup>5</sup> In spite of Vasari's assertion, which can be easily explained as consistent with his general attempt to diminish Verrocchio's influence on Leonardo, just as he downplayed Ghirlandaio's role in the training of Michelangelo, many linen drapery studies relate broadly to works executed by artists associated with Verrocchio, suggesting that, whether Leonardo invented them or not, their origin should be located within Verrocchio's workshop at the height of its fame and production in the early 1470s.<sup>6</sup> The common origin of the linen drapery studies reinforces their consideration as preparatory in the broadest sense: unrelated to specific works or commissions, they provided Verrocchio's workshop with a stock of drapery solutions that could be adapted, with proper adjustments, to different figures and compositions, male and female, sacred and profane. Similarly, the Corsini drawing should not be regarded as strictly preparatory to a work in another medium, but rather as an exploration of positions, movements, folds, and shadows that could be adapted to any number of compositions and figures, from the archangel Michael to the Virgin herself.

More significantly, this group of linen drapery studies documents the concerted, sustained, and experimental research on light and shadow pursued with unique intensity by Verrocchio and by the artists who trained with him or collaborated in the actual execution of his paintings

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Drapery Studies by Verrocchio, Leonardo and Ghirlandaio”, *Zeitschrift für Kunstgeschichte*, XLVI, 1983, pp. 27–62; *Léonard de Vinci: Les études de draperie* (as in n. 1); KEITH CHRISTIANSEN, “Leonardo's Drapery Studies”, *The Burlington Magazine*, CXXXII, 1990, pp. 572–573; BROWN (as in n. 1), pp. 76–79; FRANÇOISE VIATTE, “The Early Drapery Studies”, in *Leonardo da Vinci Master Draftsman* (as in n. 2), pp. 111–119; BAMBACH (as in n. 1); BERNARDETTE PY, *Everhard Jabach collectionneur (1618–1695): Les dessins de l'inventaire de 1695*, Paris 2001, pp. 270–274; PIETRO MARANI, *I disegni di Leonardo da Vinci e della sua cerchia nelle collezioni pubbliche in Francia*, Florence 2008 (with bibliography).

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4. For a review of attributions, see BAMBACH (as in n. 1); MARANI (as in n. 3).

5. See VASARI (as in n. 1), I, p. 626; elsewhere Vasari recorded that Piero della Francesca (p. 402), fra Bartolomeo (p. 679), and Lorenzo di Credi (p. 800) also followed a similar practice, on which see also DALLI REGOLI (as in n. 3) and VIATTE (as in n. 3), pp. 15–33. The linen drapery studies are regarded as preparatory to specific works by CADOGAN (as in n. 3) and as experimental studies by DALLI REGOLI (as in n. 3).

6. CHRISTENSEN (as in n. 3), BROWN (as in n. 1), and BAMBACH (as in n. 1) relate the linen drapery studies to Verrocchio's workshop, although Bambach follows Vasari in assigning their invention to Leonardo.

and sculptures. Possibly inspired by the study of northern paintings, which were widely available in Florence in the form of *panni dipinti*, this focused effort to recapture the textures, shadows, and reflections of the northern originals extended to the use of an analogous cloth support. Similarly to the linen drapery studies, the Corsini drawing is primarily concerned with light effects, albeit in a different medium: the painterly tempera of the linen studies is substituted with the graphic media of metal point, chalks, and white gouache. Nonetheless, both the Corsini drawing and the linen studies follow Verrocchio's practice for modeling in drawing: the color-prepared surface corresponds to the middle tone of the drawing, on top of which shadows are added in metal point, chalks or black tempera, and highlights in white gouache. Three different techniques render three different lighting conditions: the colored paper corresponds to the middle shadow; metal point, chalk, or black tempera define the darkest shadows; and white wash marks the brightest areas.

Alongside this traditional system of modeling, the Corsini drawing presents a new concept for building form. As Leonardo proceeded in the act of drawing from left to right, he gradually stopped marking highlights with white gouache, preferring instead to signal them with the untouched surface of the red prepared paper. If one isolates the area around the figure's waist from the drapery with highlights, it becomes apparent that, in the former area, the red paper no longer corresponds to the middle tone of the drawing, but rather to its highlights. It is also evident that forms emerge from the brightest areas through a gradual build-up of shadows, which Leonardo renders with a masterly combination of regular hatchings in silverpoint and blurred marks in chalk to suggest the movement of figures in a continuum of atmosphere, colors, shadows, and reflections.

At first sight, the Corsini drawing might seem to present different levels of completeness (finished versus unfinished). The contrary is the case: it registers Leonardo's gradual but unambiguous move from a traditional to a radically innovative way of representing highlights and building form. Indeed, the 'unfinished' areas of the Corsini drawing compare stunningly with the drawing technique of Leonardo's famous *Landscape* of 1473 (Fig. 4), in which the artist rendered a dense atmosphere that obfuscates the contours of landscape, treetops, rocks, river, and mountains with quick, undefined, blurred strokes in brown ink. In the 1473 *Landscape* Leonardo's strokes are freer than those he used in the Corsini drawing, which is

partly due to the different medium – pen and ink versus silverpoint – but which might also indicate a slightly earlier date for the drapery study. In both drawings, however, the fully lit areas are rendered by the untouched surface of the tinted paper. This similar treatment of highlights in the Corsini drawing and the 1473 *Landscape*, which André Chastel might have implicitly recognized when he wrote that Leonardo “treats the drapery [in the Corsini drawing] as a landscape full of surprises, cliffs, valleys, and rocky clefts [*ammaccature*]”,<sup>7</sup> hints at the relevance that the representation of atmospheric shadows may have had in Leonardo's radical revision of his drawing and painting technique. To render nuanced, atmospheric shadows Leonardo would soon start to draw in red and black chalk, apply layers of gouache of different intensity to his drawings, and paint with highly diluted oil colors applied in multiple layers. Atmospheric shadows are the distinct characteristic of Leonardo's early landscapes (the backgrounds of his *Annunciation*, *Madonna of the Carnation* [Alte Pinakothek, Munich], and *Baptism of Christ* [Galleria degli Uffizi, Florence]), while the *Adoration of the Magi* (Galleria degli Uffizi, Florence) documents, in its unfinished status, his masterful building up of forms through the superimposition of shadows.

Over the years Leonardo's research on shadows evolved graphically, pictorially, and theoretically, but already from the very beginning of his artistic career, as attested by his early works, including the Corsini drawing, it deeply informed his thinking. Rather than a preparatory or unfinished drapery study, the Corsini drawing emerges as Leonardo's synthesis of the experimental research on light and shadow pursued in Verrocchio's workshop and documented in the linen drapery studies. It is a self-conscious demonstration piece in which Leonardo declared the origins of his shadows in the representational techniques of Verrocchio's workshop while, at the same time, substituting that system with a radical new way of modeling to enhance the suggestion of motion in a continuous space. Ultimately, the Corsini drawing is not a simple drapery study but a visual genealogy of Leonardo's invention of atmospheric shadows in order to place people and things in relation to each other, the viewer, and the cosmos and that came to characterize his works from the early 1470s onward.

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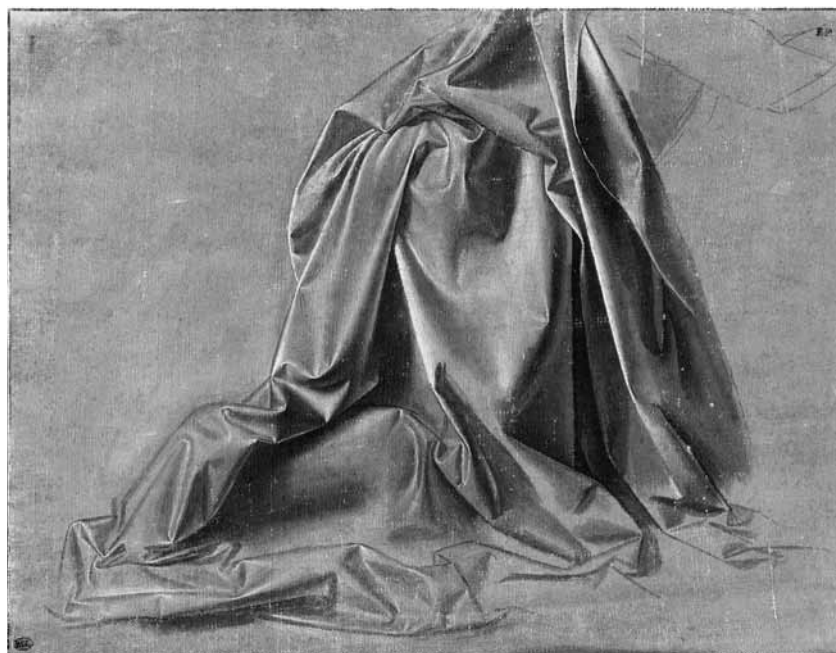
7. ANDRÉ CHASTEL, “Léonard: Pans et plis”, in *Léonard de Vinci: Les études de draperie* (as in n. 1), pp. 11–14.



1. LEONARDO DA VINCI, *Drapery Study for a Kneeling Figure*, early 1470s, metal point, black chalk, and white gouache on cinnabar-red prepared paper, 25.2 × 19.0 cm. Istituto Nazionale per la Grafica, Gabinetto Nazionale delle Stampe, Rome, FC 125770.



2. LEONARDO DA VINCI, *Drapery Study for a Kneeling Figure*, early 1470s, gray and white tempera and white wash on gray prepared linen, 16.4 × 16.8 cm. Gabinetto Disegni e Stampe degli Uffizi, Florence, no. 420 E.



3. LEONARDO DA VINCI, *Drapery Study for a Kneeling Figure*, early 1470s, gray and white tempera and brown wash on gray prepared linen, 20.6 × 28.1 cm. Musée du Louvre, Paris, no. 2256.



4. LEONARDO DA VINCI, *Landscape*, 1473, pen and ink on paper, 19.0 × 28.5 cm. Gabinetto Disegni e Stampe, degli Uffizi, Florence, no. 8 P.