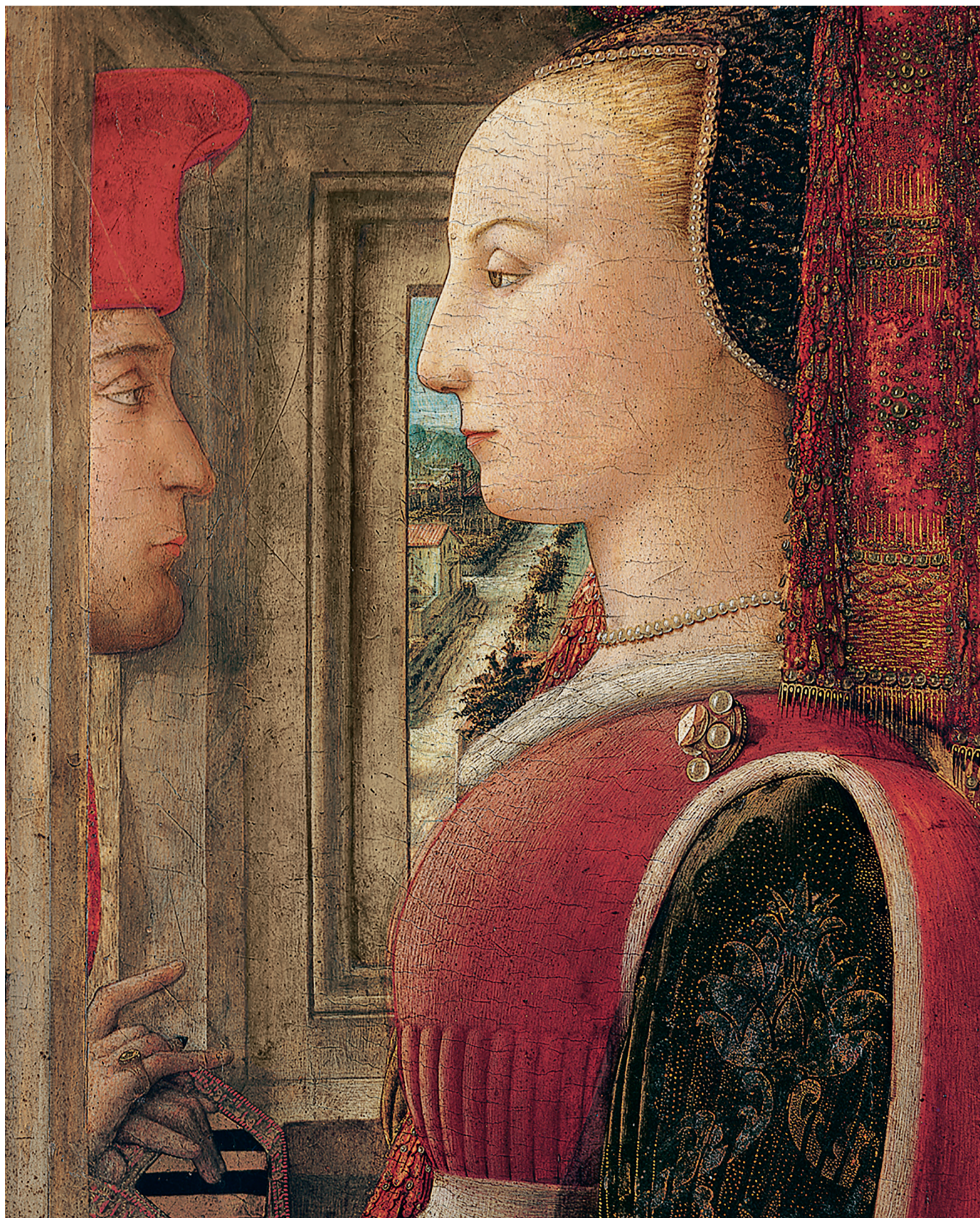


METROPOLITAN
MUSEUM

JOURNAL 51



METROPOLITAN
MUSEUM

JOURNAL 51

VOLUME 51 / 2016

**THE
MET**

The Metropolitan Museum of Art

NEW YORK

EDITORIAL BOARD

Sarah Graff

*Associate Curator,
Ancient Near Eastern Art*

Elizabeth Mankin Kornhauser

*Alice Pratt Brown Curator of
American Paintings and Sculpture*

Denise Patry Leidy

*Brooke Russell Astor Curator
of Chinese Art, Asian Art, emerita*

Marco Leona

*David H. Koch Scientist in Charge,
Scientific Research*

Dorothy Mahon

Conservator, Paintings Conservation

Joan R. Mertens

Curator, Greek and Roman Art

Joanne Pillsbury

*Andrall E. Pearson Curator, Arts of Africa,
Oceania, and the Americas*

Rebecca A. Rabinow

*Former Leonard A. Lauder Curator of Modern
Art, Curator in Charge of the Leonard A.
Lauder Research Center*

Luke Syson

*Iris and B. Gerald Cantor Chairman,
European Sculpture and Decorative Arts*

This publication is made possible by Marica and Jan Vilcek and by a gift from Assunta Sommella Peluso, Ada Peluso, and Romano I. Peluso, in memory of Ignazio Peluso.

The *Metropolitan Museum Journal* is published annually by The Metropolitan Museum of Art.

Mark Polizzotti, *Publisher and Editor in Chief*
Elizabeth L. Block, *Senior Editor*
Paul Booth, *Production Manager*
Tina Henderson, *Designer and Typesetter,
based on original design by Lucinda
Hitchcock*
Elizabeth de Mase, *Image Acquisitions
Manager*

Manuscripts submitted for the *Journal* and all correspondence concerning them should be sent to journalsubmissions@metmuseum.org. Guidelines for contributors are given on p. 6.

Published in association with the University of Chicago Press. Individual and institutional subscriptions are available worldwide. Please direct all subscription inquiries, back issue requests, and address changes to: University of Chicago Press, Journals Division, P. O. Box 37005, Chicago, IL 60637-0005, USA. Phone: (877) 705-1878 (U.S. and Canada) or (773) 753-3347 (international), fax: (877) 705-1879 (U.S. and Canada) or (773) 753-0811 (international), email: subscriptions@press.uchicago.edu, website: www.journals.uchicago.edu

ISBN 978-0-226-43804-7
(University of Chicago Press)
ISSN 0077-8958 (print)
ISSN 2169-3072 (online)

Library of Congress
Catalog Card Number 68-28799

The Metropolitan Museum of Art endeavors to respect copyright in a manner consistent with its nonprofit educational mission. If you believe any material has been included in this publication improperly, please contact the Publications and Editorial Department.

Photographs of works in the Metropolitan Museum's collection are by the Imaging Department, The Metropolitan Museum of Art, unless otherwise noted. Additional illustration credits are on p. 198.

Copyright © 2016 by
The Metropolitan Museum of Art, New York

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system, without permission in writing from The Metropolitan Museum of Art.

Typefaces: Calibre, Lyon, and Harriet
Printed on Creator Silk, 150 gsm
Separations by Altimage New York
Printed and bound by Verona Libri,
Verona, Italy

Front cover illustration: Unidentified artist (Senegalese). Detail of Portrait of a woman, 1910s. See fig. 1, p. 180.

Back cover illustration: Dihl et Guérhard (French, 1781–ca. 1824; Manufacture de Monsieur le duc d'Angoulême, until 1789). Detail of *Vase with Scenes of Storm at Sea*, ca. 1797–98. See fig. 1, p. 112.

Illustration on p. 2: Fra Filippo Lippi (Italian, ca. 1406–1469). Detail of *Portrait of a Woman with a Man at a Casement*, ca. 1440. See fig. 1, p. 64.

Illustration on pp. 8–9: Detail of the Metropolitan Vase. Guatemala or Mexico. Maya, Late Classic, 7th–8th century. See fig. 7b, p. 47.

Contents

Sophilos and Early Greek Narrative

MARY B. MOORE, 10

Fragments of Time: Ancient Glass in the Department of Greek and Roman Art

CHRISTOPHER S. LIGHTFOOT, 30

Creation Narratives on Ancient Maya Codex-Style Ceramics in the Metropolitan Museum

JAMES A. DOYLE, 42

Protecting Fertility in Fra Filippo Lippi's

Portrait of a Woman with a Man at a Casement

J. RUSSELL SALE, 64

A Palace for Louis XVI: Jean Augustin Renard at Rambouillet

BASILE BAUDEZ, 84

Jean Pillement: Shipwrecks and the Sublime

KATHARINE BAETJER, 96

Stormy Weather in Revolutionary Paris:

A Pair of Dihl et Guérhard Vases

IRIS MOON, 112

A Disputed Pastel Reclaimed for Degas:

Two Dancers, Half-Length

MARJORIE SHELLEY, 128

Design Drawings from the Studios of Louis Comfort Tiffany: An Introduction

ALICE COONEY FRELINGHUYSEN, 146

Louis Comfort Tiffany's Designs for American Synagogues (1889–1926)

PATRICIA C. PONGRACZ, 148

Drawing, Photography, and the Design of Tiffany Studios'

Te Deum Laudamus Mosaic Triptych

MARINA RUIZ MOLINA AND CHRISTINE OLSON, 162

Photographic Portraiture in West Africa: Notes from "In and Out of the Studio"

GIULIA PAOLETTI AND YAËLLE BIRO, 182

MANUSCRIPT GUIDELINES FOR THE METROPOLITAN MUSEUM JOURNAL

The *Metropolitan Museum Journal* is issued annually by The Metropolitan Museum of Art. Its purpose is to publish original research on works in the Museum's collection. Articles are contributed by members of the Museum staff and other art historians and specialists. Submissions should be emailed to: journalsubmissions@metmuseum.org.

Manuscripts are reviewed by the *Journal* Editorial Board, composed of members of the curatorial, conservation, and scientific departments.

To be considered for the following year's volume, an article must be submitted, complete including illustrations, by October 15.

Once an article is accepted for publication, the author will have the opportunity to review it after it has been edited and again after it has been laid out in pages. The honorarium for image costs is \$300, and each author receives a copy of the *Journal* volume in which his or her article appears.

Manuscripts should be submitted as double-spaced Word files. In addition to the text, the manuscript must include endnotes, captions for illustrations, photograph credits, and a 200-word abstract. Each part of the

article should be in a separate file except the endnotes, which should be linked to and appear at the end of the text file.

For the style of captions and bibliographic references in endnotes, authors are referred to *The Metropolitan Museum of Art Guide to Editorial Style and Procedures*, which is available from the Museum's Publications and Editorial Department upon request, and to *The Chicago Manual of Style*. Please provide a list of all bibliographic citations that includes, for each title: full name(s) of author or authors; title and subtitle of book or article and periodical; place and date of publication; volume number, if any; and page, plate, and/or figure number(s). For citations in notes, please use only the last name(s) of the author or authors and the date of publication (e.g., Jones 1953, p. 65; Smith and Harding 2006, pp. 7–10, fig. 23).

When submitting manuscripts, authors should include a PDF of all illustrations. Please do not embed images within text documents. If the manuscript is accepted, the author is expected to provide publication-quality images as well as copyright permissions to reproduce them in both the print and electronic editions of the *Journal*. The *Journal* requires either digital

scans of at least 300 dpi at 3,000 pixels wide, color transparencies (preferably 8 x 10 in. but 4 x 6 in. is also acceptable), or glossy black-and-white photographs (preferably 8 x 10 in. with white borders) of good quality and in good condition.

In a separate Word file, please indicate the figure number, the picture's orientation, and any instructions for cropping. Reproductions of photographs or other illustrations in books should be accompanied by captions that include full bibliographic information.

The author of each article is responsible for obtaining all photographic material and reproduction rights.

ABBREVIATIONS

MMA The Metropolitan Museum of Art
MMAB *The Metropolitan Museum of Art Bulletin*
MMJ *Metropolitan Museum Journal*

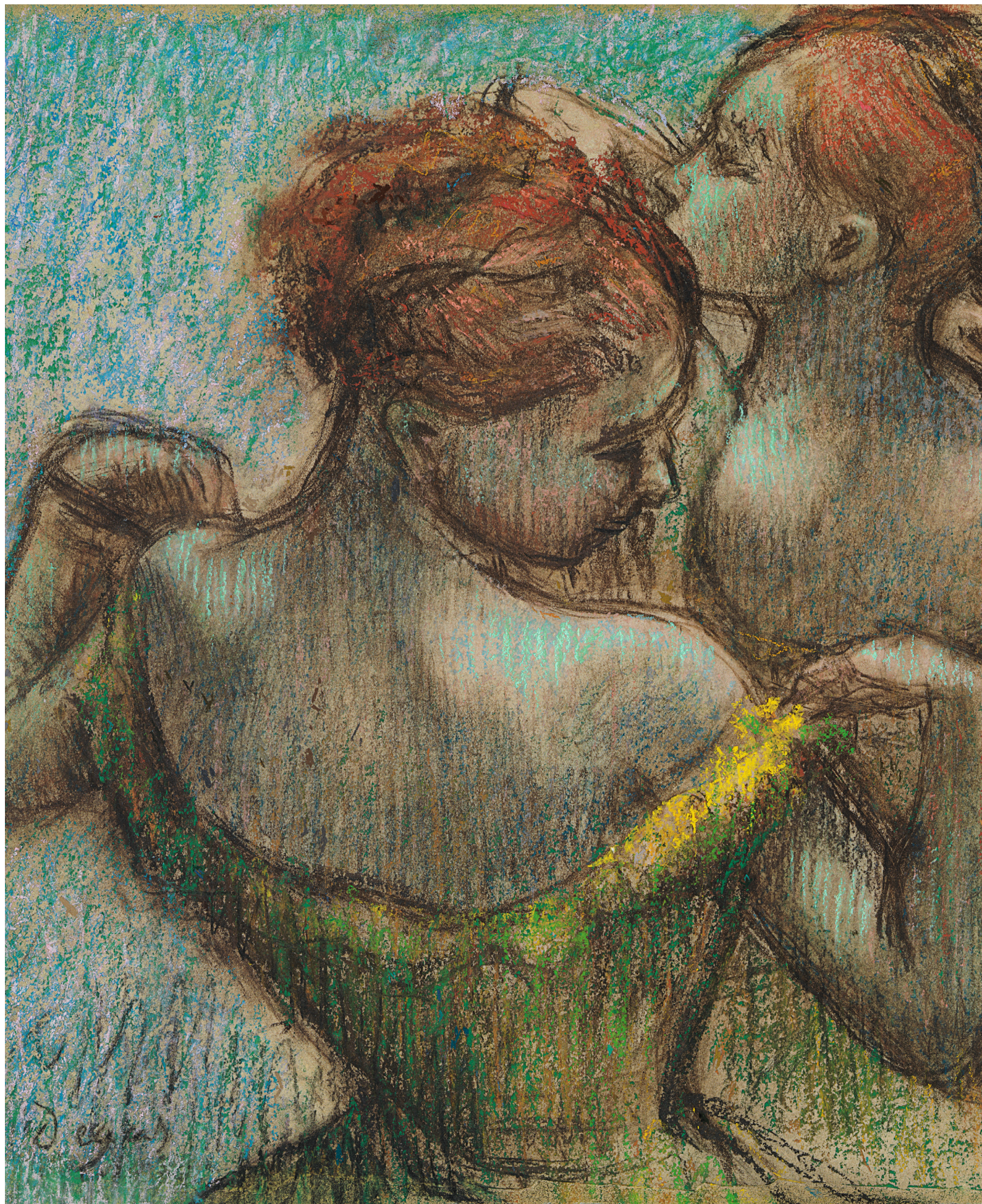
Height precedes width and then depth in dimensions cited.

METROPOLITAN
MUSEUM

JOURNAL 51







A Disputed Pastel Reclaimed for Degas: *Two Dancers, Half-Length*

When Edgar Degas (1834–1917) died, his studio was filled with unfinished works. Many were charcoal drawings—*articles*, as he called his commercial productions—that he would often develop with pastel to produce salable compositions. His dealer Paul Durand-Ruel and friend Mary Cassatt expressed concern that these previously unknown works risked being completed by disreputable artists.¹ This possibility was the basis for the dismissal of The Metropolitan Museum of Art’s vibrantly colored *Two Dancers, Half-Length* (fig. 1) as not entirely by Degas’s hand or as a copy. Bequeathed to the Museum in 1973 by Emma A. Sheafer and given a date of about 1897 because of its similarity to a body of work by Degas with the same subject matter, the pastel has raised doubts in the minds of many scholars.²

Several other factors contributed to the rejection of the drawing as authentic. Discrepancies were noted



fig. 1 Edgar Degas (French, 1834–1917). *Two Dancers, Half-Length*, ca. 1897–1905. Pastel and charcoal on tracing paper with a joined strip, laid down to cardboard, 18 $\frac{3}{8}$ \times 21 $\frac{1}{8}$ in. (46.7 \times 54.9 cm). Signed, lower left: *Degas*. The Metropolitan Museum of Art, The Lesley and Emma Sheaffer Collection, Bequest of Emma A. Sheaffer, 1973 (1974.356.31)

fig. 2 Ambroise Vollard,
Degas: Quatre-vingt-dix-huit
reproductions signées par
Degas . . . (1914, pl. XXV)



between the execution of the figures and that of the background, suggesting a second hand.³ The pastel was included in neither the posthumous sale of works from the artist's atelier in 1919 nor the catalogue raisonné of his paintings, pastels, and drawings published in 1946–49.⁴ To add to these adversities, the New York gallery that sold it to the Sheafers in 1950 was alleged to have been involved in questionable practices.⁵ Challenged on the grounds of stylistic integrity and lacking documentary proof of origin, the pastel was not accepted as autograph and was subsequently exhibited only once, in 1975, in a selective presentation of the Sheaffer bequest to the Museum.⁶

Degas made many half-length dancer images with which the present work might have been confused. This fact might account for its omission from the atelier sale, particularly in light of “the indescribable disorder” of the artist's studio at his death.⁷ The work's absence from the catalogue raisonné could be explained by the fact that the pastel never surfaced during the intervening years or, if it did, was misidentified. The catalogue's

author, Paul-André Lemoisne, was hindered in his research by the dispersal of many sheets to anonymous collectors following the 1919 sale.⁸ That his unsurpassed, four-volume work contains some errors and exclusions is not surprising, given that it was compiled during World War II.⁹

Among the many photographs that were taken during Degas's lifetime of his studies of half-length dancers, one shows a lost composition that bears a close resemblance to the pastel under discussion (fig. 2). Commissioned by the art dealer Ambroise Vollard, who was also a collector¹⁰ and close friend of the artist, for his book *Degas: Quatre-vingt-dix-huit reproductions signées par Degas (peintures, pastels, dessins et estampes)* (also known as the Album Vollard), the photograph was printed from a glass-plate negative that Vollard had Degas sign at the lower right on an added strip of paper (fig. 3).¹¹ All the negatives used in the book, which was published in 1914, were signed in this way as proof of the photographed works' authenticity. The image shown in figure 2 appeared untitled, as plate XXV, in



fig. 3 Glass-plate negative of photograph shown in fig. 2, ca. 1904–14, $9\frac{1}{2} \times 11\frac{1}{8}$ in. (24×30 cm). Signed, lower right on an added strip of paper: *Degas*. Fonds Ambroise Vollard, Musée d'Orsay, Paris (ODO 1996 56 4008)

the Album Vollard but was not reproduced again, and the pastel it depicts disappeared.

Although similarities are immediately evident in the major contours, postures, and gestures of the dancers in the photograph and in the Metropolitan Museum's pastel, closer scrutiny reveals significant differences in the two compositions. Among them are the location of the artist's signature, which appears at the upper right in the photograph and the lower left in the pastel, and the low position of the tutu at the right in the photograph. Absent from the pastel are the extended raised elbow of the dancer at the back; the abstract network of strokes at the lower left (possibly representing a large bow, a motif often depicted by Degas in ballet scenes); the ambiguous diagonal line extending behind the head on the left; and the abundance of pentimenti surrounding the four arms. Also of note is the tighter framing of the figures in the photograph, which has a narrower background and shallower foreground than the Museum's work and presents the crown of the head at the right as cropped. Furthermore, though it is not possible to ascertain from the black-and-white print the colors of the composition that Vollard published, comparison with a black-and-white photograph of the Metropolitan's pastel reveals a marked difference in the tonal values of the backgrounds (fig. 4).

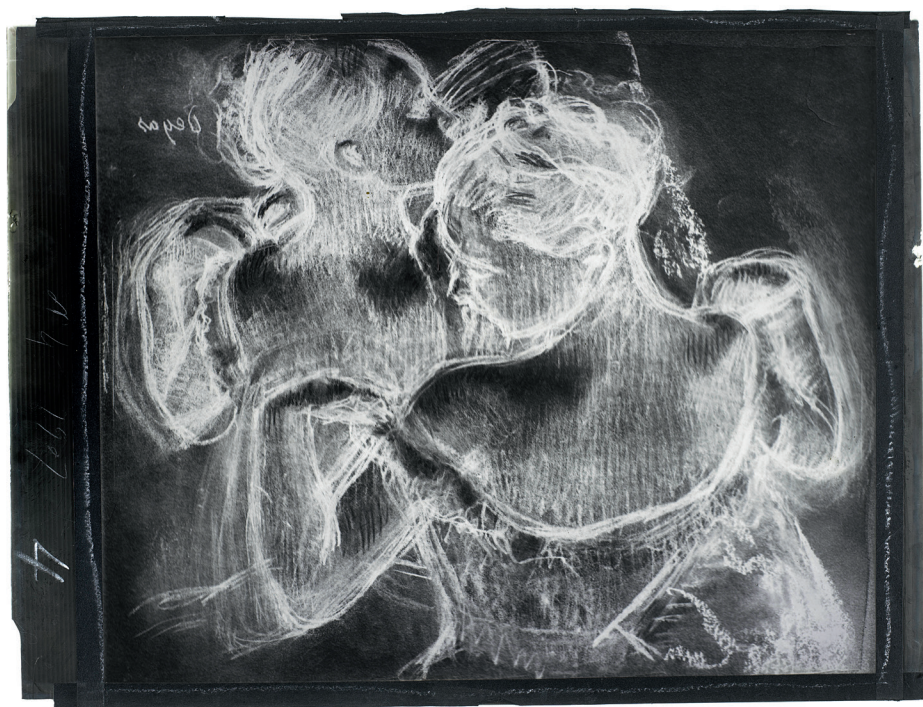
While these divergences remain irrefutable, examination of the photograph's glass-plate negative reveals that the spatial relationship of the figures to their setting is identical in the two compositions. The apparent visual inconsistency results simply from an uneven band of black paper tape, about one-half inch wide, carelessly adhered to and overlapping the perimeter of the verso of the plate (fig. 5). During the printing process, the tape blocked the border of the negative from exposure to light, effectively cropping the resulting image and compressing the *mise-en-scène*. (In the photograph, the black paper tape appears as a white border.) The print seems to have been further cropped for publication in the Album Vollard.

This article takes another look at *Two Dancers, Half-Length* and discusses how the many perplexing issues that have been seen to discredit the work actually provide tantalizing clues to its identification and help establish its authenticity. The disparities in the appearances of the pastel and the Vollard photograph are analyzed by examining the materials and techniques Degas used in executing the composition. Also considered are the artist's aesthetic intentions; his innovative method of tracing and, as proposed here, the possible genesis of that method in his sketchbook in the Metropolitan Museum; and his structuring of the composition by layering pastel over a charcoal tracing. The close visual correspondence of the Museum's pastel with the Vollard photograph and the pastel's embodiment of Degas's customary studio practices suggest that *Two Dancers, Half-Length* is, in fact, by Degas and that it is the completed version of the work shown in figure 2. As will be argued, the original drawing was later reworked, presumably by the artist. It disappeared between 1914, when Vollard's book was published, and the atelier sale of 1919, and it reappeared at the Metropolitan Museum about six decades later without any historical record. A complex, layered composition, the work testifies to the artist's distinctive procedures using mutable and insubstantial materials to create and revise his late pastels.

During the last phase of Degas's production, beginning about 1890, his working methods underwent a transformation. In the 1870s and 1880s his drawings "had a clearly defined purpose" as preparatory studies for later compositions.¹² During that earlier period, he returned continually to classical sources and to his own academic oeuvre for inspiration, recasting motifs as contemporary subjects and changing details of pose, gesture, physiognomy, and costume for use in pastels and paintings.

fig. 4 Black-and-white digital photograph of *Two Dancers, Half-Length* (fig. 1)

fig. 5 Verso of fig. 3, bordered with black paper tape



Drawings from his wide-ranging repertoire, which included figure studies, portraits, and scenes of dance rehearsals, performers, milliners, bathers, laundresses, and jockeys naturalistically portrayed in clearly defined settings, often were reworked in series related by subject and developed in notebooks, on various types of paper and in diverse media. He made monotypes, counterproofs, etchings, studies in graphite and charcoal, and sketches in oil, gouache, pastel, and *peinture à l'essence* (oil paint diluted with turpentine and then drained, yielding a fairly dry, matte medium), and he explored many of their subjects further in sculpture.¹³

In the 1890s, still turning to earlier motifs to fuel his projects, he narrowed his range of subjects, concentrating largely on bathers, jockeys, milliners, and ballet dancers. The new works, unlike their predecessors, neither told stories nor depicted slices of contemporary life. Rejecting narrative and the purely naturalistic, Degas abandoned precision and the particular and traded visual subtlety for boldness. His draftsmanship became

emphatic; his line, more angular yet free; his color, strident and vigorous; his compositions, simplified and increasingly abstract.

Dancers were a particularly favored subject for Degas and a source of sustained fascination. When asked by the collector Louisine Havemeyer, "Why, Monsieur, do you always do ballet dancers?" Degas replied that dancers were "all that is left us of the combined movement of the Greeks."¹⁴ His ballet pictures from this time portray variations on half-length dancers, dancers in overlapping friezes or ensembles, and dancers seen from the front or back, adjusting a strap or an earring.¹⁵ The revision and reuse of motifs by repeating, reversing, and recombining them, so prominent in these compositions, were fundamental to Degas's practices and reflect his long-standing interest in technical experimentation—most notably with pastel, monotypes, counterproofs, and photography, and with the opportunities these media offered for multiplying his images and transforming his ideas. However, in these final years, he varied his motifs using a new technical procedure. Rather than making individual studies in an array of media on separate sheets, he used only charcoal and pastel, inventively layering the colored medium over charcoal on a single support and conflating the preliminary and finished designs. He used tracing paper as his vehicle for replication and as the physical and aesthetic foundation for these innovative works.

Tracing paper (*calque* in French), a translucent, smooth-surfaced drawing support, had been employed for centuries by artists, architects, and draftsman, who used it to execute preliminary studies, to copy, and to transfer designs. By the mid-nineteenth century the material was manufactured in rolls, sheets, and books, and its use was widespread.¹⁶ Degas would have been introduced to tracing paper as an academic tool during his brief attendance at the Ecole des Beaux-Arts in Paris in the 1850s. Inspired by the example of Ingres, whom he fervently admired, and other Neoclassical artists who regularly employed *calque* in their working process, he used it frequently over the next twenty years. During the 1880s, which ushered in his most creative period of technical innovation, tracing paper gained increasing importance in his production.¹⁷ In his later years, this seemingly expendable material became the principal support for his pastels and charcoal drawings, and he executed hundreds of these works on it, far more than on any other type of paper he employed for these media at that time.

From a technical standpoint, tracing paper was not a practical choice. The compact, nonfibrous surface makes it a poor substrate for direct media. Pastel and

fabricated charcoals are weakly bound, and natural charcoal contains no binder; thus, these materials require a roughened surface or a ground layer of tempera or similar material to establish a bond with the support. Such demands seem not to have deterred Degas. His preference for tracing paper, unlike his earlier choice of richly colored opaque papers, was based on its utility for repeating motifs and creating series of drawings rather than on its aesthetic potential. In the Metropolitan Museum's *Two Dancers, Half-Length*, the paper imparts no discernible textural effect, nor is its typically muted, yellowish color immediately apparent between the strokes of pastel. In particular, the reserves between the green, blue, and pink hachures in the background are visible only on close inspection, and the paper underlying the figural group is almost entirely obscured beneath a continuous blanket of pastel. For Degas, the benefits of the translucent support were strictly functional: they enabled him to transfer, endlessly vary, and correct stock images he had executed earlier in his career.

Degas described his method succinctly: "Make a drawing, begin it again, trace it, begin it again, and trace it again."¹⁸ This remark, which aptly applies to the steps he took when laying the foundation of *Two Dancers, Half-Length*, is given graphic form in his sketchbook held in the Metropolitan's collection. The volume is one of thirty-six extant cahiers in which, over the course of more than three decades, from 1853 to 1886, the artist made rapid notations of his observations, sketching motifs as source material for his drawings and paintings, recording details of artistic and personal interest, and jotting down technical recipes and addresses.¹⁹ The Museum's sketchbook, which Degas used from about 1882 to 1885, contains mostly charcoal drawings. Measuring 10 ⁵/₈ by 8 ¹/₂ inches, it was probably too large for him to carry around out of doors but, as its drawings suggest, was more likely employed in the studio for exploring ideas. As in most of Degas's notebooks, the drawings are not focused on a single theme, and they are clustered at different sections of the binding. Composed of 499 leaves of diaphanous onionskin paper numbered in stamped black ink, the book was originally intended for office use—as a ledger in which transaction records were duplicated with copy ink or carbon paper.

What is exceptional about Degas's use of this account book for sketching is his manipulation of its translucent pages. He drew exclusively on the recto of each of the bound sheets, proceeding from the back of the book to the front. He would execute a drawing on a

fig. 6 Edgar Degas. Four untitled drawings in album of forty-five figure studies, ca. 1882–85. Charcoal on translucent paper, each sheet $10\frac{3}{8} \times 8\frac{1}{2}$ in. (26.8 × 21.9 cm). The Metropolitan Museum of Art, Fletcher Fund, 1973 (1973.9)



right-hand page, then turn the preceding blank leaf (on the left) on top of it, trace the underlying image onto this clean sheet while making changes in the new design, and continue to turn the leaves in this manner to repeat the process. Thus, from pages 49 to 46, for example, he successively traced a standing, draped figure with left arm extended, a study for *Personnages d'Opera* (Lemoisne 594), reworking and modifying each of the four drawings by adjusting the position of the arm and slightly increasing the scale of the body (fig. 6).

As seen in this sketchbook, Degas's attraction to the process of tracing anticipates the more complex technique he developed about 1890 for his larger, layered drawings, exemplified by *Two Dancers, Half-Length*. As observed by the English painter William Rothenstein (1872–1945), Degas began by pinning tracing paper on top of a previously made drawing, presumably fixing the two layers to a wall or board.²⁰ Using charcoal, he then copied the original or a detail of it onto the tracing paper and used the traced image as the basis for a new composition. He would repeat the process over and over, altering the outlines in each new tracing just as he had on the onionskin leaves of his sketchbook. On these large sheets, such as the one used for the Metropolitan's *Two Dancers, Half-Length*, he synthesized motifs, combining

and reversing tracings from stock models and varying the figures' spatial relationships to one another or to the format of the composition. In many of the dance scenes, Degas focused on the upper torsos and arms of his subjects, setting them against empty expanses of vaguely suggested stage flats. In the Museum's pastel, he juxtaposed two half-length ballerinas, their figures closely placed and overlapping. One adjusts her shoulder straps; the other extends her left arm across her body to meet her raised right arm, as if she were rotating away from the foreground figure. Degas reused these two poses individually and in groups, portraying them from different points of view in numerous works in pastel, oil, and charcoal as well as in monotype and counterproof.²¹

These late compositions, which started out as charcoal drawings loosely traced from a model, did not serve as conventional underdrawings that subsequently would be obscured by other media, nor did Degas use them for preparatory purposes, as he had done for decades with studies of subjects in several media on papers of different types. Rather, in the Museum's composition and in other fully worked compositions he made about this time, the charcoal drawing formed the first stage of a layered composition. It established the framework for rendering the figures in pastel and,



fig. 7 Infrared reflectogram mosaic of fig. 1, showing the charcoal drawing beneath the pastel

because it remained visible, served as an integral component of the finished work.

Degas's charcoal drawings are characterized by multiple vigorous, unbroken contours and broad masses of tone to which energetic, linear strokes and hatchings were applied. This manner of handling, which imbues the drawings with sculptural force, is seen in countless sheets executed over many decades and is evident from the Vollard photograph, its glass-plate negative, and the infrared reflectogram mosaic showing the underlying charcoal layer of the Museum's pastel (fig. 7).²² The diversity of effect Degas achieved with charcoal was made possible by the friable nature of

the medium, which readily yields to the pressure of the hand: bearing down heavily creates dark, compact marks; a light touch produces effects of transparency.²³ A stroke of charcoal can be modulated by light rubbing with a finger or a stump (a pointed coil of paper or chamois) to spread the particles; incising or scratching the charcoal will expose the paper below. All these techniques were employed in *Two Dancers, Half-Length*.

Degas's methods of replication and mark-making on large sheets of tracing paper were inexact and inevitably gave rise to unplanned divergences from the stock drawings he used as his templates. Unlike the Museum's sketchbook, in which each page was secured

fig. 8 Digital overlay of figs. 1 and 2, showing the correspondence of the figural groups in the two images



to the adjacent leaf by the binding, thus limiting the amount of chance deviation from the underlying drawing, large, insubstantial sheets, even when pinned to the model, were subject to movement or slippage, causing misalignment of the copied strokes and stumped passages. Degas's disregard of such askew layers was observed by Vollard, who described the artist "making a correction by beginning the new figure outside the original outlines, the drawing growing larger and larger."²⁴ In fact, Degas's process of repeatedly tracing and retracing was as much the cause of the simplification and anatomical ungainliness of his late figures as was his independence from the model.²⁵

The divergence of the tracings from the model is important to take into account when considering the authenticity of the Museum's pastel, for if that work were a copy or a tracing of the Vollard composition, or if the two compositions were based on the same stock

drawing, differences in the scale and modeling would be expected. However, a digital overlay of the Vollard photograph and the pastel shows that the drawing of the two dancers is unquestionably the same size in each composition (fig. 8). Comparison of the Vollard photograph with the infrared reflectogram mosaic of the pastel reveals many other identical features. For instance, in the figural group, the major and secondary contours, such as the neckline of the nearer dancer's costume and the positions of the hands and arms, are identical. The figures in both compositions have the same interior modeling: the faces have identical vertical hatchings, and the boundaries between light and shadow correspond; the same is true of the closely spaced hatchings along the leftmost arm and wrist and on the dancers' backs, and of the well-defined stumping in the tight space of the farther dancer's raised right hand (figs. 9a,b,c). Additional evidence supporting the



fig. 9 The partially stumped, raised right hand of the dancer in back, seen in details of three images: (a) *fig. 1* (the Metropolitan Museum's *Two Dancers, Half-Length*); (b) *fig. 7* (the infrared image of the Metropolitan Museum's *Two Dancers, Half-Length*); (c) *fig. 2* (the Vollard photograph)

proposal that the drawing depicted in the Vollard photograph and the Metropolitan's pastel are two phases of the same work is seen in the subtle, incised lines within the lower contour of the nearer dancer's right arm (*fig. 10a*) and in the irregular left edge of the sheet (*fig. 10b*).²⁶ It is indeed unlikely that the particular dynamics of execution and the details of condition captured in the Vollard photograph could have been so exactly duplicated in the Metropolitan's pastel by tracing, freehand copying, or happenstance.

When the charcoal drawing was completed, a light, vaporous spray of fixative or steam was applied to stabilize its surface.²⁷ After the medium was secured, Degas's mounter pasted the translucent sheet to a lightweight, subtly textured, whitish card, generally known as Bristol board. The backing served to impart opacity to the tracing paper, conferred a slightly nubby topography to the surface of the sheet, and provided the solidity and resiliency required for the next stage: the application of the vigorously manipulated pastel layer.²⁸ The mounting process, mainly reserved for the charcoals Degas planned to develop further with color or for which he had a buyer, also provided the artist with an opportunity to adjust the format of these sheets—effectively creating new compositions. The process had an aesthetic importance equal to his manipulation of his media. He frequently attached strips of paper to the card backing of a cropped drawing in order to extend the pictorial field. At times he made explicit notes in his cahiers regarding the placement of these strips and how wide they were to be.²⁹

Two Dancers, Half-Length was constructed in this way. As can be seen on close examination of the pastel and the Vollard photograph, a narrow, horizontal strip attached across the top of the sheet provided additional space to expand the drawing of the cropped head on the right (*fig. 10c*). Along the join, infrared reflectography reveals smudged charcoal fingerprints, evidence of the hand that pasted the band of paper to the larger sheet (see *fig. 7*). In the Museum's composition, the added strip is covered with a thick layer of pastel that obscures the seam, a treatment often found in Degas's highly finished works.

Degas customarily added pastel once the charcoal drawing had been mounted. In some works, color was limited to sparse touches or to coverage that was comparable in extent to the charcoal, whereas in highly finished compositions, the pastel was built up in multiple, thick layers, obscuring the charcoal and the surface of the paper almost entirely.³⁰ Like the charcoal layer, pastel was applied using any number of techniques, thus

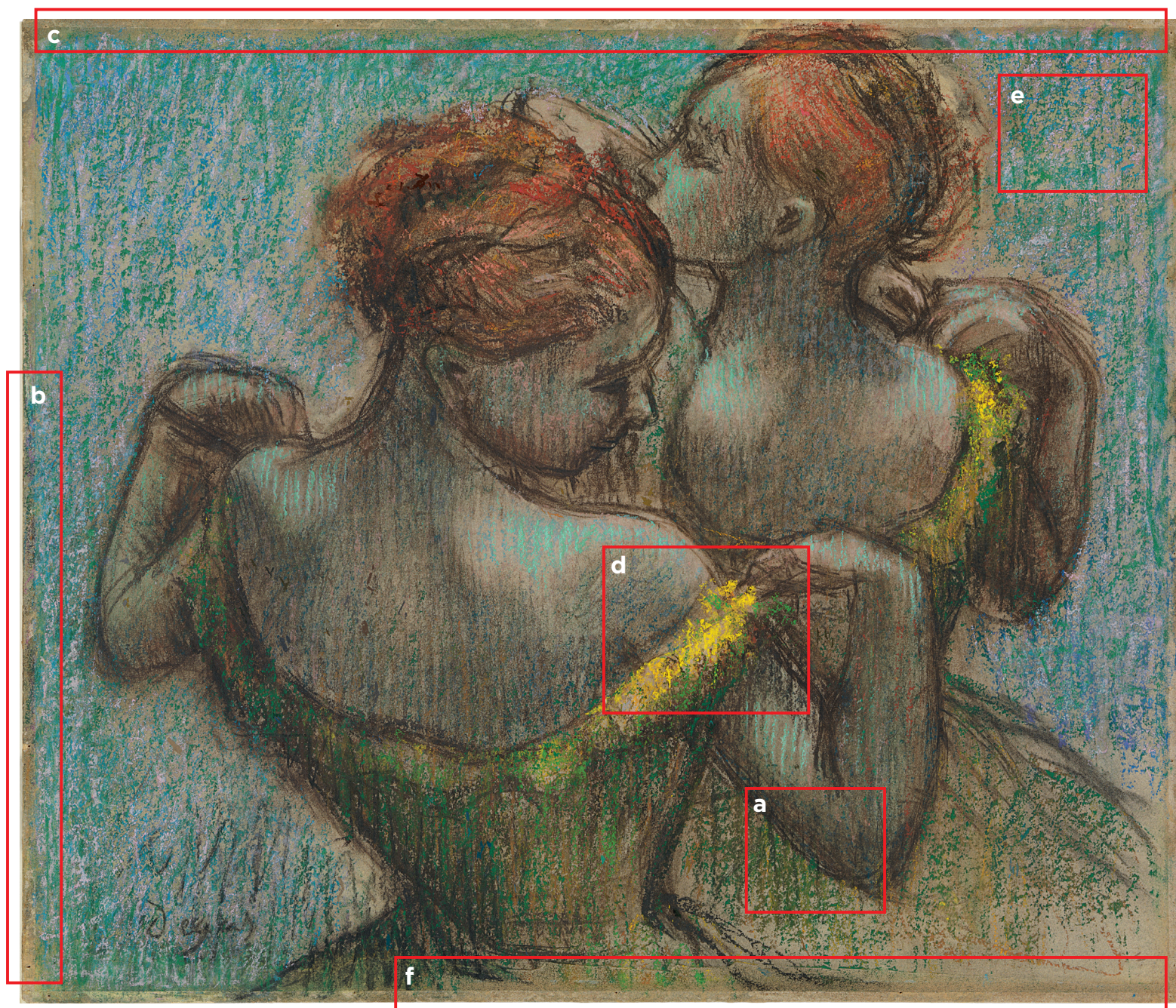


fig. 10 *Two Dancers, Half-Length* (fig. 1) with areas of detail outlined in red. (a) Incised lines on the lower contour of the upper right arm of the dancer in front. These lines are also seen in fig. 2. (b) Irregular left edge of the tracing paper. (c) Added strip of tracing paper across the top of the composition. (d) Thickened pastel on the shoulder strap of the front dancer. (e) Undisturbed pastel layer covering the site of the removed signature. (f) Horizontal tear and pastel strokes extending across the loss in the tracing paper onto the mount

producing the varied pictorial effects among this large group of late works. In the Metropolitan Museum's *Two Dancers, Half-Length*, the artist established the primary layer by applying variously colored sticks of pastel over the charcoal figures. He then produced the flesh-hued undertone of the near dancer's back and shoulders by spreading the dry powder with his finger or a stump, unifying these areas into dense, smooth, and broad expanses while allowing the emphatic charcoal contours and parallel hatchings to remain visible. The uniform flatness of this primary pastel layer—the fact that it lacks the irregular texture that would have resulted from bearing down on the laminate of tracing paper and Bristol board—suggests the possibility that the figures were partially colored before the sheet was mounted.

Because pastel contains only a minute amount of binding medium, it is powdery. Thus, when it is manipulated in the manner described above, the many facets of its light-reflecting particles are compressed and the colors become somber. Degas avoided this reduction in chromatic intensity by inventively applying a fixative to selected areas of the composition before superimposing additional pastel and repeating the process between each successive layer of color, a procedure observed by Vollard.³¹ By this means, Degas prevented the powder from intermixing with the underlying color. Thus, rather than employing fixative for the purpose of stabilizing the picture surface, as is the common practice, he used it to create a barrier between layers of pastel, to ensure their tonal clarity. While current analytical techniques cannot detect traces of this type of resin between pastel strata, the compact quality of the flesh-toned passages in *Two Dancers, Half-Length* suggests not only its presence but also that Degas's intention was to produce a planar, uniform topography, a pictorial effect recalling his naturalistic pastels of the 1870s and 1880s and the surfaces of Neoclassical painting he had long admired—surfaces that, according to Ingres, were “always [to be as] flat as a board.”³²

Over this foundation Degas applied vertical hatchings in rich, tactile strokes of color. These pulsating accents, notably the brilliant yellow and green trim of the costumes and the scintillating turquoise reflections on the shoulder blades, are far more roughly textured and exuberant than their counterparts in his early pastels. He produced them by slightly moistening the tip of the crayon, causing the pastel particles to agglomerate or cluster (fig. 10d).³³ A hallmark of Degas's late pastels, these strokes of unfixed, thickened color, which reflect more light than the surrounding passages because of their irregular texture, create dramatic contrasts with

the exposed, underlying hues. The play of texture and color, which Degas exploited to great effect, also served to evoke a sense of the artificial stage lighting illuminating the performers' collarbones, foreheads, and the tips of their noses, an effect that continued to intrigue him, as it had in the past. Certain of these vigorous marks are discernible in the Vollard photograph as white strokes against the print's gray field, notably those corresponding to the turquoise hatching superimposed on the flat passages of flesh tone at the shoulders and to the orange-pink highlights in the hair (see fig. 2).

At the time *Two Dancers, Half-Length* was executed, Degas no longer concerned himself with placing his figures in clearly defined interiors. In both the Metropolitan Museum's pastel and the Vollard photograph, the background is a simplified, abstract space, a foil for the dancers. Unlike the composition's primary subject matter, the traced figures, which were developed with a complex of stumping and highly wrought, decisive strokes of dry and dampened pastel crayons, the background was applied rapidly in nearly vertical, unmodulated, and overlapping hatchings in blue, green, and pink (fig. 10g). The irregular texture of these strokes was produced by applying moderate pressure while dragging the dry crayons over the composite of pastel, tracing paper, paste, and card. The uneven surface of this layered substrate and the action of the hand simultaneously broke up and compressed the pastel powder. The broken quality of these strokes suggests that the subtly nubby texture of the underlying paper was transferred to the pastel as the background was being built up, an effect that would have occurred only after the tracing paper was mounted on the Bristol, as may have been the case with *Two Dancers, Half-Length*. The visual, almost flickering quality that results from this handling is a consistent element in Degas's late pastels: he employed it on top of stumping, over the paper reserve, above broad marks made with the side of a crayon, across entire compositions (as in the Museum's *Russian Dancers*, 1899 [1975.1.166]), and to emphasize a figure or a background area.³⁴

These vigorous diagonal background hatchings do not appear in the Vollard photograph. When that image is compared to a black-and-white photograph of the Metropolitan's composition, it is readily apparent that the background values (the position of the colors on a gray scale) in the two photographs are not the same: the background of the Vollard composition is light, whereas the background of the Museum's pastel, primarily composed of strokes of Prussian blue and chromium green, appears dark (see figs. 2, 4).³⁵ There are two possible

explanations for this disparity. The first is that the Vollard photograph was taken with orthochromatic film, which was commonly used at that time. Because of the film's spectral sensitivity to blue and green, the distinction between the hatched background strokes would not have been clearly visible, and the blue hatchings in the figures would not have been differentiated from the underlying flesh tone. Rather, these hues would have registered as white with vague markings of gray in the photographic print, which is the way they appear in the Vollard image, and as black in the glass-plate negative (see figs. 2, 3).³⁶ The other possibility, proposed here, is that pastel was not present in the background, or was present only in moderate touches, when the photograph was taken, and that *Two Dancers, Half-Length*, like many of Degas's charcoal *articles*, was not fully developed in color at that time.³⁷

Central to the argument that pastel was not present in the background of the 1914 composition is the fact that certain charcoal marks visible in the photograph are not found in the Museum's *Two Dancers, Half-Length*: these include the pentimenti surrounding the arms, the unidentified charcoal network at the lower left, the low contour of the tutu on the right, and the artist's signature at the upper right. Had the Vollard charcoal been covered with pastel, an inherently opaque medium, these marks would have been hidden or diminished in intensity and would not have registered with clarity on the photograph. (It was, in fact, pastel's opacity that enabled Degas to superimpose the medium over layers of oil-based black ink in his monotypes and thus to obscure the printed design. It also allowed him to minimize the visibility of charcoal drawing in his late pastels, as he did at selected sites in *Two Dancers, Half-Length*.) Curiously, examination of the Metropolitan's work under infrared reflectography (IRR) shows that the charcoal details cited above as present in the Vollard photograph are missing beneath the pastel background in the Museum's *Two Dancers, Half-Length*. Closer scrutiny with IRR explains the puzzling absence of these marks. It reveals that they have been physically removed from the paper: some seem to have been scraped off with a knife, others rubbed out with an eraser. Under IRR, the site of the signature seen at the upper right in the Vollard composition appears as a halo of blank paper, and the outer strokes of the nearby chignon have grown very faint (see fig. 7); only vague traces of the presumed bow are visible in the lower left corner; and the shadowy fingerprints along the top strip show signs of having been partially removed. The process of erasure was evidently

clean and efficient, as little charcoal powder was left behind. This suggests that Degas must have valued tracing paper not only for its transparency, but also for its nonfibrous, reusable surface. Significantly, there are no disruptions in the pastel lying on top of the erasures (fig. 10e). As it would not have been possible to remove the charcoal details without disturbing the color above them, the charcoal marks that were effaced must have been applied directly to the paper reserves.

Whether motivated by his aesthetic judgment, impelled by a potential buyer's interest in the picture, or governed by his habit of "prolonging the process of revision indefinitely,"³⁸ Degas seems at this stage—after he had removed the unwanted marks of charcoal from the tracing paper—to have added pastel to the background of *Two Dancers, Half-Length*. Perhaps he did it to hide his changes: he used pastel to cover the faint pentimenti still visible around the arms, camouflage the strip of paper added at the top, conceal the remaining traces of the presumed bow and the original positions of the tutus, and cover the site of his effaced signature. At the left he squared off the irregular edge by extending the background treatment over the exposed Bristol (fig. 10b), and at the lower edge, he masked the physical damage to the sheet by extending the network of green and yellow strokes onto the mount (fig. 10f). The general repetition in the sequence of the background colors (green, blue, then pink), the uniform pressure applied to the crayons, and the fluidity of the strokes suggest the work of a single artist and are in accord with the techniques Degas used in his pastels of the early 1900s. Rather than signaling the reworking of an existing layer of pastel, these vibrant strokes seem to have been applied to blank areas of paper to complete the composition.

Investigation of Degas's procedures provides explanations to the questions surrounding the authenticity of the Metropolitan Museum's *Two Dancers, Half-Length* and gives insight into the artist's choice of materials. Pastel appealed to him because of its rich color and because it proffered the broadness of painting and the linearity of drawing; it could be mixed with water and other solvents; and it could be layered and reworked. With charcoal, also readily manipulated to produce fine lines and transparent or dense masses, he could achieve effects similar to the ones he sought with the black tones of monotype, etching, and lithography, media to which he had long been attracted. Tracing paper afforded him endless aesthetic freedom to repeat and reinvent his dancers, and as the Museum's pastel reveals, it gave him a technical edge in revising them.

Degas's proclivity to change or correct works was part of his lifelong creative process and is well documented. He kept his artworks in the studio for months and even years, retouching and sometimes disfiguring them, reworking older compositions he had set aside as well as those in progress.³⁹ He experimented incessantly and with "restless dissatisfaction."⁴⁰ This same unceasing drive led him to make changes in his readily yielding pastel crayons and the methods he devised for working with them on tracing paper, as he did in *Two Dancers, Half-Length*.

During his final productive years, the late 1890s to about 1905, beset by declining vision, Degas embarked on few new compositions but altered and added color to many works that were in his atelier. He continued to work in pastel as late as 1905–10.⁴¹ It is not known when the reworking of *Two Dancers, Half-Length* took place, but it would have occurred between the time the partially colored charcoal was photographed and the time the album was published, thus between 1904 and 1914, the years when Vollard's main art holdings were photographed by Etienne Delétang, who was then in the dealer's employ.⁴² Compelled by his habit of revising his earlier drawings, Degas may have been inspired to complete *Two Dancers, Half-Length* when he was asked to sign Vollard's glass-plate negative, possibly near the time of the album's publication in 1914—although, compared with his last pastels, this composition's chromatic and formal restraint makes so late a date improbable.⁴³ On the other hand, he may have altered the pastel after encountering it when it was photographed, either reclaiming the drawing from the dealer or retrieving it from his own collection. It is conceivable that he reworked it as early as 1904 or shortly thereafter, as much as a decade before the album was published.⁴⁴ Presumably, when the elderly artist was asked to sign the glass-plate negative, the

drawing it represented—a theme he had portrayed in numerous subtle variations—had long since been modified. Wanting to comply with Vollard's wishes, Degas verified the earlier image, still recognizable to him, as his own.

Unaccounted for at Degas's death, the pastel remained missing, and the only evidence of its existence was Vollard's photograph. That image, when held up for comparison to the eventually rediscovered pastel—as it may have been by Lemoisne and has been by others in recent times—no longer served as a convincing record of the composition's original appearance based on surface features alone. Yet, as close examination reveals, Degas's technical processes in his late years and the many identical details the pastel shares with the Vollard photograph, present persuasive evidence that the Museum's *Two Dancers, Half-Length* evolved from the missing 1914 composition, and with little doubt, did so through the intervention of the artist.

ACKNOWLEDGMENTS

I am indebted to Asher Ethan Miller, assistant curator, Department of European Paintings, for providing information about the provenance of *Two Dancers, Half-Length*, and I am greatly appreciative for the access I was granted to the records of that department. My thanks go to Angela Campbell, assistant conservator, and Rachel Mustalish, conservator, Department of Paper Conservation, for producing the infrared reflectography mosaic and the overlay, respectively, and to Pamela Wilson and Alice Haas for their generous library assistance.

MARJORIE SHELLEY

Sherman Fairchild Conservator in Charge, Department of Paper Conservation, The Metropolitan Museum of Art

NOTES

- 1 Tinterow 2006, p. 157.
- 2 Degas scholar Paul-André Lemoisne did not record the Metropolitan's picture in his catalogue raisonné (1946–49), but he did include three other pastels employing the same grouping of two dancers adjusting their shoulder straps and dated them to about 1897. For these and other related works in oil, pastel, and charcoal, see, for example, Lemoisne 1946–49 (works dated ca. 1896–99): no. 1267 (*Four Dancers [En Attendant l'Entrée en Scène]*, oil on canvas, 1895–1900, National Gallery of Art, Washington, D.C., Chester Dale Collection [1963.10.122]), and nos. 1274–76. Lemoisne dated other compositions closely comparable to the Metropolitan Museum's *Two Dancers, Half-Length* to 1899: *ibid.*, nos. 1344–48.
- 3 Gary Tinterow, former chairman, Department of Nineteenth-Century and Modern and Contemporary Art, The Metropolitan Museum of Art, verbal communication, 2010. The authenticity of the work is questioned in Tinterow 2006, pp. 157, and 161n45. According to Tinterow (in conversation with the author, 2010), a curatorial committee that was preparing the international Degas exhibition of 1988 and which included himself and Degas scholars Jean Sutherland Boggs and Theodore Reff, expressed doubts about the pastel's authenticity and determined not to include it in the exhibition. This information was corroborated by Asher Ethan Miller in conversation with the author, 2016.
- 4 *Catalogue des tableaux, pastels et dessins par Edgar Degas, et provenant de son atelier* (Degas atelier sale 1919). The catalogue raisonné, by Paul-André Lemoisne (1946–49), includes photographs—many of them taken by Vollard and Durand-Ruel—of works that were once in Vollard's and Degas's collections, as well as works found in Degas's studio at his death.
- 5 Asher Ethan Miller in conversation with the author, 2012.
- 6 Hackenbroch and Parker 1975, no. 32.
- 7 The chaos of Degas's studio at 37, rue Victor Massé, was described during the artist's lifetime by his friend Paul Lafond (1918–19; as translated in Gordon and Forge 1988, p. 32) and by his model Pauline, who characterized it as cluttered and dusty (Michel 1919, pp. 458–59; Kendall 1996, p. 26). After Degas died, Durand-Ruel inventoried the contents of his house and studio and reported that the latter was dusty, crammed with paraphernalia, easels, pastels, charcoals, photographs, paintings, and pieces of sculpture scattered over many floors (Durand-Ruel to Royal Cortissoz, June 7, 1919, in Cortissoz 1925, pp. 245–46; quoted in Reff 1971, p. 165n77).
- 8 Thomson 1987, p. 133n182.
- 9 Ronald Pickvance cites several examples of omissions and confusion of similar works in Lemoisne's catalogue raisonné; see, for example, Pickvance 1963, pp. 256n6, 258n24.
- 10 The Lemoisne catalogue (1946–49) identifies many of Degas's pastels as having been in Vollard's collection, including no. 589, *Dancers*, a study for MMA 64.165.1. For references to Vollard's stellar art collection, see, for example, Assante di Panzillo 2006.
- 11 Vollard 1914, pl. XXV.
- 12 Pickvance 1963, p. 263.
- 13 Degas's drawings throughout his oeuvre testify to the range of media and types of paper he employed at different stages in his drawing process. For example, he executed studies for *Mary Cassatt at the Louvre* (1879–80) in pastel and charcoal and as etchings. His drawings also show how he characteristically returned to his early studies to develop his ideas, and how his exploration of a motif frequently continued over many years. In the 1870s, for instance, Degas returned to and reworked his many studies from 1860–61 for *Young Spartans*, a painting he would finish only in 1880. Similarly, multiple preparatory studies in graphite, charcoal, and pastel from the late 1870s would culminate in *The Little Fourteen-Year-Old Dancer*, the wax sculpture of 1880 that Degas continued to work on until after 1900.
- 14 Havemeyer 1961, p. 256. Georges Jeannot (1848–1934), his friend and disciple, similarly observed, “Degas was very concerned with the accuracy of movements and postures. He studied them endlessly”; as translated in Gordon and Forge 1988, p. 223.
- 15 See the late dancers in pastel illustrated in Lemoisne 1946–49 (works dated ca. 1896–99): nos. 1267–76; (works dated 1899): nos. 1344–65bis.
- 16 Paillot de Montabert 1829–51, vol. 9, chap. 614, pp. 624–32. This classic text on academic instruction describes the various ways in which tracing paper was used. The material was also employed by nonacademic artists, among them Delacroix, Géricault, Moreau, and Daumier. From the mid-nineteenth century, tracing paper was advertised in colormen's catalogues, such as those of Goupil & Cie, published internationally and in France by Sennelier.
- 17 Jules Chialiva (1875–1934), the son of Luigi Chialiva (1841–1914) (see note 27 below), claimed to have introduced him to the common studio practice of using tracing paper over a drawing in order to correct or simplify it; see Chialiva 1932. Among the many examples of Degas's early work on tracing paper are *Young Spartan Girl*, *Study for Young Spartans*, ca. 1860, Cabinet des Estampes, Musée du Louvre (Boggs et al. 1988, no. 41, ill.); and *Study for Mme Théodore Gobillard*, 1869, MMA 1984.76 (Lemoisne 1946–49, no. 213); in the 1870s, *Two Grooms on Horseback*, essence and gouache on oiled paper, 1875–77, Musée du Louvre (Orsay), RF5601 (*ibid.*, no. 382).
- 18 “Faites un dessin, recommencez-le, calquez-le; recommencez-le, et calquez-le encore.” Lafond 1918–19, vol. 1, p. 20.
- 19 MMA 1973.9; Reff 1985, vol. 2, pp. 144–45, Notebook 36.
- 20 Paraphrased in Gammel 1961, p. 13.
- 21 For related compositions, see note 2 above. The frequent reuse, interchanging, and reworking of these motifs make it impossible to identify the original stock drawings of most of the late pastels. A possible source for the dancers' poses portrayed in many pastels and paintings of the late 1890s is seen in several photographic negatives that were found in Degas's atelier after his death (Cabinet des Estampes, Bibliothèque Nationale de France) but have not been firmly attributed to him; see the discussion in Shackelford 1984, p. 112; Boggs et al. 1988, p. 573; and Daniel 1998, pp. 136–37.
- 22 For Degas's charcoal drawing technique, see also *Three Studies of Ludovic Halévy Standing*, ca. 1880, charcoal counterproof on buff wove paper, National Gallery of Art, Washington, D.C. (1985.64.167); *Two Dancers Resting*, ca. 1895, charcoal on tracing paper, mounted on cardboard, Philadelphia Museum of Art (1963-181-144); *Two Dancers*, 1905, charcoal and pastel on tracing paper, Museum of Modern Art, New York (B&R149); and *Grand Arabesque, Second Time*, 1900–1905, charcoal on tracing paper (private collection; Hauptman 2016, fig. 164). Infrared reflectography (IRR), a form of spectral imaging, renders most pigments and pastels transparent but allows underlying carbonaceous materials, such as charcoal and black chalk, to be seen because they absorb light in the infrared range of the spectrum. The image in figure 7 was made using an 800 nanometer long-pass filter.
- 23 Charcoal is made from twigs of vine wood charred at high heat in an enclosed chamber devoid of oxygen.

- 24 Vollard 1936, p. 102.
- 25 Degas's late dancers are rendered with indifference to anatomical accuracy. Commentary in the early literature notes their resemblance to bas-reliefs of classical sculpture (Gsell 1918, p. 373), whereas more recent assessment, reflecting contemporary taste, considers them "another form of life" (Boggs et al. 1988, p. 596, under no. 382) and "unbeautiful" (DeVonyar and Kendall 2003, p. 272).
- 26 The incising along the lower contour of the right arm of the front dancer, which exposes the light tone of the tracing paper, occurred in the initial drawing process. It was produced with the sharpened point of a charcoal stick, which, by the action of the stroke, displaced the medium. The vertical tear along the lower left seen in the Vollard print is visible along the entire left side of the Museum's pastel in sharp, raking light. The irregular horizontal loss along the lower edge of the pastel does not appear in the Vollard print. Its position corresponds to the lower area of the glass-plate negative that was covered by the black paper tape, a site that was further cropped in the photograph.
- 27 D. Rouart 1988, pp. 51–54, 64, 67; Gammel 1961, p. 13. The ingredients of the fixative, prepared by Degas's friend Luigi Chialiva, the Swiss painter, architect, and engineer with whom the artist often discussed technique, have never been identified. For Degas's use of a fixative and its possible identification, see Fletcher and DeSantis 1989.
- 28 Degas's mounter and framer is identified as Père "Lézin" in Vollard 1927, p. 65. According to Vollard (ibid., p. 68), Lézin would "glue" Degas's pastels on tracing paper to card, known as "Bristol board." Most of the pastels, including the Metropolitan's *Two Dancers, Half-Length*, were then mounted to millboard, a rigid panel made of recycled paper, old sails, and rope. This material was commonly used to back pastels in the late nineteenth century to enable them to be framed. It is not certain if the lined pastels were applied to the millboard during the initial mounting process or when they were framed. Many of Degas's pastels on wove paper, which lacks a distinctive grain, were also mounted on millboard. The edges of these sheets were wrapped and pasted to the back of the panel without an intermediary layer of card.
- 29 Reff 1967, p. 260.
- 30 Examples of Degas's transformation of his *articles*—simple charcoal drawings—into highly wrought and colored pastels include *Two Dancers*, 1905 (Museum of Modern Art, New York, SPC65.90), a charcoal drawing with sparse additions of color; *Russian Dancer*, 1899 (MMA 29.100.556), in which the charcoal and pastel are equally visible; and *Russian Dancers*, 1899 (MMA 1975.1.166), in which pastel obscures the underlying charcoal.
- 31 Vollard 1936, p. 113. This inventive method was also observed by Ernest Rouart, one of Degas's few protégés, who worked with him in his studio; see D. Rouart 1988, pp. 51–54, 64, 67. According to these sources, Degas applied fixative by boiling it and directing the steam toward selected sites of his composition. It is present in very dilute concentrations, embedded within the particles of pigment and filler (inert white powder combined with pigment to impart opacity and body) and between layers of pastel. It is not readily detectable under spectral analysis and is below the detection limit of nondestructive instrumentation, including terahertz and Ramon spectroscopy. Its subtle luster is occasionally visible in raking light in exposed, localized sites in Degas's pastels.
- 32 Loyrette 1988, p. 46.
- 33 On Degas's use of wet pastel techniques, see Fletcher and DeSantis 1989.
- 34 For emphasis of a figure, see *After the Bath*, 1895 (Musée du Louvre, Paris, RF31343; Lemoisne 1946–49, no. 1335; Boggs et al. 1988, fig. 311). For emphasis of a background area, see *Young Girl Braiding Her Hair*, 1894 (private collection; Lemoisne 1946–49, no. 1146; Boggs et al. 1988, fig. 319).
- 35 The presence of chrome green, Prussian blue, strontium yellow, chrome yellow, and iron was detected with X-ray fluorescence by Amy E. Hughes, Andrew W. Mellon Fellow in Conservation, Department of Paper Conservation, MMA. Pink, the third color added to the background, was analyzed by the author. It fluoresced under long-wave ultraviolet radiation, indicating that it consists primarily of an organic colorant combined with an iron oxide pigment. This mixture was commonly used at the turn of the century to produce various red tones in commercially prepared pastel.
- 36 Tonal reversals common to this type of film suggest that the blue and green hues in the Museum's pastel are likely the same as those represented in the black-and-white Vollard image. The discrepancies result from the different sensitivities of orthochromatic and panchromatic film. The same tonal value reversal is present in Vollard's photograph (1914, pl. XVII) of *The Dancers* (MMA 64.165.1; Lemoisne 1946–49, no. 589), in which the blue costumes of the four background figures printed out as white. Orthochromatic film is no longer available; attempts to replicate it digitally have been unsuccessful.
- 37 For example, see *After the Bath (Woman Drying Her Feet)*, ca. 1900 (Art Institute of Chicago, 1945.34; Shackelford and Rey 2011, fig. 204), in which charcoal is the primary medium and pastel is present in relatively small touches.
- 38 Reff 1971, p. 150.
- 39 Degas's habit of constant revision, which he acquired as a young artist, lasted into his final years of production, eliciting frequent comments. See, for example, E. Rouart 1936, pp. 161–62; Reff 1971, pp. 141, 164 (quoting Rouart's memoir); and Loyrette 1988, p. 41 and nn. 50, 51.
- 40 Thomson 1987, p. 35.
- 41 Because it is not known when Degas finally ceased his artistic production, the dating of the late work is problematic. That Degas was actively making pastels in 1907 is documented in a note by the artist from August of that year: "Here I am back again at drawing and pastel" (Guérin 1947, p. 226); and was attested by Etienne Moreau-Nelaton, who, on December 26, 1907, observed him working on a pastel (Moreau-Nelaton 1931, reprinted in Lemoisne 1946–49, vol. 1, p. 260). Degas is quoted as telling Daniel Halévy on December 10, 1912, "Since I moved [in early 1912] I no longer work"; see Tinterow 2006, p. 155; see also Boggs 1988, p. 481. Degas's pastels from 1905–10 include *Seated Bather Drying Her Hair*, dated to 1894 by Lemoisne but now believed to have been completed later (Kendall 1996, pp. 297–304). Tinterow (2006, p. 156) proposes that some pastels, such as *Dancer in the Wings* (Saint Louis Art Museum), could have been made as late as 1910–12.
- 42 Cahn 2006, p. 264.
- 43 It is claimed that Degas signed the photographs in late 1913 or early 1914; however, documentation supporting this assertion is lacking. See Tinterow 2006, pp. 156–57.
- 44 Vollard published a series of monographic albums on artists, including Paul Cézanne, Berthe Morisot, and Auguste Renoir, each of which took years to realize. It is conceivable that the Degas album, too, was prepared over an extended period. See Cahn 2006, pp. 264–65.

REFERENCES

- Assante di Panzillo, Maryline
2006 "The Dispersal of the Vollard Collection." In Rabinow et al. 2006, pp. 259–62.
- Boggs, Jean Sutherland
1988 "The Late Years, 1890–1912." In Boggs et al. 1988, pp. 481–85.
- Boggs, Jean Sutherland, Douglas W. Druick, Henri Loyrette, Michael Pantazzi, and Gary Tinterow
1988 *Degas*. Exh. cat., Galeries Nationales du Grand Palais, Paris; National Gallery of Canada, Ottawa; MMA. New York: MMA; Ottawa: National Gallery of Canada.
- Cahn, Isabelle
2006 "The Vollard Archives: Myth and Reality." In Rabinow et al. 2006, pp. 263–68.
- Chialiva, Jules
1932 "Comment Degas a changé sa technique du dessin." *Bulletin de la Société de l'Histoire de l'Art Français* [24], pp. 44–45.
- Cortisoz, Royal
1925 *Personalities in Art*. New York: C. Scribner's Sons.
- Daniel, Malcolm R.
1998 *Edgar Degas, Photographer*. Exh. cat., MMA; J. Paul Getty Museum, Los Angeles; Bibliothèque Nationale de France, Paris. New York: MMA.
- Degas atelier sale
1919 *Catalogue des tableaux, pastels et dessins par Edgar Degas et provenant de son atelier, dont la 3^e vente aux enchères publiques, après décès de l'artiste*. Sale, Galerie Georges Petit, Paris, April 7–9.
- DeVonyar, Jill, and Richard Kendall
2003 *Degas and the Dance*. Exh. cat., Detroit Institute of Arts; Philadelphia Museum of Art. New York: Harry N. Abrams.
- Fletcher, Shelley, and Pia C. DeSantis
1989 "Degas: The Search for His Technique Continues." *Burlington Magazine* 131, no. 1033 (April 1989), pp. 256–65.
- Gammel, R. H. Ives
1961 *The Shop-Talk of Edgar Degas*. Boston: University Press.
- Gordon, Robert, and Andrew Forge
1988 *Degas*. Translations by Richard Howard. New York: Harry N. Abrams.
- Gsell, Paul
1918 "Edgar Degas statuaire." *La renaissance de l'art français et des industries de luxe*, no. 10 (December), pp. 373–78.
- Guérin, Marcel, ed.
1947 *Degas. Letters*. Translated by Marguerite Kay. Oxford: B. Cassirer.
- Hackenbroch, Yvonne, and James Parker
1975 *The Lesley and Emma Sheaffer Collection: A Selective Presentation*. Exh. cat. New York: MMA.
- Hauptman, Jody
2016 *Degas: A Strange New Beauty*. Exh. cat. New York: Museum of Modern Art.
- Havemeyer, Louise
1961 *Sixteen to Sixty: Memoirs of a Collector*. New York: Privately printed.
- Kendall, Richard
1996 *Degas: Beyond Impressionism*. Exh. cat. London: National Gallery Publications in association with the Art Institute of Chicago.
- Lafond, Paul
1918–19 *Degas*. 2 vols. Paris: H. Floury.
- Lemoisne, Paul-André
1946–49 *Degas et son oeuvre*. 4 vols. Paris: P. Brame et C. M. de Hauke. Reprint ed., New York: Garland, 1984.
- Loyrette, Henri
1988 "What is fermenting in that head is frightening." In Boggs et al. 1988, pp. 35–46.
- Michel, Alice
1919 "Degas et son modèle." *Mercure de France*, February 1, pp. 457–78.
- Moreau-Nelaton, Etienne
1931 "Deux heures avec Degas." *L'amour de l'art* 12 (July), pp. 267–70. Reprinted in Lemoisne 1946–49, vol. 1, p. 260.
- Paillot de Montabert, Jacques-Nicolas
1829–51 *Traité complet de la peinture*. 9 vols. Paris: J-F. Delion.
- Pickvance, Ronald
1963 "Degas's Dancers: 1872–6." *Burlington Magazine* 105, no. 723 (June), pp. 256–67.
- Rabinow, Rebecca A., et al.
2006 *Cézanne to Picasso: Ambroise Vollard, Patron of the Avant-Garde*. Exh. cat., MMA; Art Institute of Chicago; Musée d'Orsay, Paris. New York: MMA.
- Reff, Theodore
1967 "Exhibition of Drawings by Degas." *Art Quarterly* 30, no. 3–4, pp. 253–63.
1971 "Technical Aspects of Degas's Art." *MMJ* 4, pp. 141–66.
1985 *The Notebooks of Edgar Degas: A Catalogue of the Thirty-Eight Notebooks in the Bibliothèque Nationale and Other Collections*. Rev. ed. 2 vols. New York: Hacker Art Books.
- Rouart, Denis
1988 *Degas in Search of His Technique*. Translated by Pia C. DeSantis, Sarah L. Fisher, and Shelley Fletcher. Geneva: Skira; New York: Rizzoli.
- Rouart, Ernest
1936 "Souvenirs de Monsieur Ernest Rouart." In Valéry 1936, pp. 137–62.
1937 "Degas." *Le point*, ann. 2 (February 1), pp. 5–22.
- Shackelford, George T. M.
1984 *Degas, The Dancers*. Exh. cat. Washington, D.C.: National Gallery of Art.
- Shackelford, George T. M., and Xavier Rey
2011 *Degas and the Nude*. Exh. cat., Museum of Fine Arts, Boston, and Musée d'Orsay, Paris. Boston: Museum of Fine Arts.
- Thomson, Richard
1987 *The Private Degas*. Exh. cat., Whitworth Art Gallery, Manchester; Fitzwilliam Museum, Cambridge. London: Arts Council of Great Britain; Herbert Press.
- Tinterow, Gary
2006 "Vollard and Degas," with research by Asher E. Miller. In Rabinow et al. 2006, pp. 151–61.
- Valéry, Paul
1936 *Degas: Danse, dessin*. Paris: Ambroise Vollard.
- Vollard, Ambroise
1914 *Degas: Quatre-vingt-dix-huit reproductions signées par Degas (peintures, pastels, dessins et estampes)* [known as the Album Vollard]. Paris: Galerie A. Vollard.
1927 *Degas, An Intimate Portrait*. Translated by Randolph T. Weaver. New York: Greenberg.
1936 *Recollections of a Picture Dealer*. Translated by Violet M. Macdonald. Boston: Little Brown; London: Constable. Reprint ed., New York: Dover, 1978.

ILLUSTRATION CREDITS

Sophilos and Early Greek Narrative: fig. 1: National Archaeological Museum, Athens, Giannis Patrikianos. © Hellenic Ministry of Culture and Sports/Archaeological Receipts Fund; figs. 2, 7: © The Trustees of the British Museum; fig. 4: su concessione della soprintendenza Archaeologia della Toscana – Firenze; fig. 6: drawing by Anandaroop Roy after Mary B. Moore; figs. 8, 12, 14: American School of Classical Studies at Athens: Agora Excavations; fig. 10: from Bakir 1981, p. 35, fig. 66; fig. 11: From the Collection of Arthur S. Richter; fig. 15: from Ernst Pfuhl, *Malerei und Zeichnung der Griechen*, vol. 3, *Verzeichnisse und Abbildungen* (Munich: F. Bruckmann, 1923), p. 42; fig. 16: from Thiersch 1899, pl. 3; fig. 17: Maidstone Museum and Bently Art Gallery

Fragments of Time: Ancient Glass in the Department of Greek and Roman Art: fig. 12: from Buora and Moretti 2013, p. 54; fig. 13: Tony Querrec, Musée du Louvre, Paris, France, ©RMN-Grand Palais/Art Resource, NY; fig. 14: from Rossi and Chiaravalle 1998, p. 69

Creation Narratives on Ancient Maya Codex-Style Ceramics in the Metropolitan Museum: fig. 1: map by Anandaroop Roy; fig. 2: Foundation for the Advancement of Mesoamerican Studies, Inc.; figs. 3, 11a–f, 14, 15b: drawings by James A. Doyle; figs. 4, 7a,b, 8a, 9a–c, 10 a,b: Juan Trujillo, The Photograph Studio, MMA; fig. 5: Jorge Pérez de Lara Elías; figs. 6, 12: Princeton University Art Museum / Art Resource, NY; figs. 7b, 8b, 10b: digital renderings by Thomas Ling, The Photograph Studio, MMA; fig. 13: drawing by James A. Doyle after photograph by Kai Delvendahl; fig. 15a: Justin Kerr; fig. 16: illustration by Heather Hurst, © 2007

Protecting Fertility in Fra Filippo Lippi's *Portrait of a Woman with a Man at a Casement*: figs. 2, 4, 11: Scala / Art Resource, New York; fig. 3: drawing by Anandaroop Roy; fig. 5: © Ashmolean Museum of Art and Archaeology, University of Oxford; fig. 6: Alfredo Dagli Orti / The Art Archive at Art Resource, New York; fig. 7: National Gallery of Art, Washington, D.C.; fig. 8: Courtesy of the Department of Antiquities, © Cyprus Museum, Nicosia; fig. 9: © Massimo Pizzotti, provided by AGE Photostock; fig. 10: © Albertina, Vienna; fig. 12: © RMN-Grand Palais / Art Resource, NY; fig. 13: V&A Images, London / Art Resource, NY; fig. 15: © Trustees of The British Museum

A Palace for Louis XVI: Jean Augustin Renard at Rambouillet: figs. 1, 4–8: © RMN-Grand Palais / Art Resource, NY

Jean Pillement: Shipwrecks and the Sublime: fig. 3: © Lyon, MTMAD - Pierre Verrier; fig. 4: Courtesy National Gallery of Art, Washington, D.C.; fig. 6: Philadelphia Museum of Art, Purchased with the Alice Newton Osborn Fund, object number: 1986-11-1; fig. 7: © Besançon, musée des Beaux-Arts et d'Archéologie, Pierre Guenat; fig. 10: © Musées de Béziers

Stormy Weather in Revolutionary Paris: A Pair of Dhl et Guérhard Vases: figs. 1, 4: Joseph Coscia Jr., The Photograph Studio, MMA; fig. 2: rendering by Thomas Ling, The Photograph Studio, MMA; figs. 3, 6: Bibliothèque Nationale de France, Paris; fig. 5: © Victoria and Albert Museum, London; fig. 7: Martine Beck-Coppola, © RMN-Grand Palais/Art Resource, NY; fig. 8: Jean-Claude Routhier, © RMN-Grand Palais/Art Resource, NY; fig. 9: Sally Chappell/The Art Archive at Art Resource, NY; fig. 10: Courtesy of the Getty's Open Content Program; fig. 11: Musée du Domaine Départemental de Sceaux

A Disputed Pastel Reclaimed for Degas: *Two Dancers, Half-Length*: figs. 2, 9c: Heather Johnson, The Photograph Studio, MMA; figs. 3, 5: © RMN-Grand Palais / Art Resource, NY; fig. 6: Marjorie Shelley; figs. 7, 9b: Angela B. Campbell; fig. 8: digital overlay by Rachel Mustalish

Louis Comfort Tiffany's Designs for American Synagogues (1889–1926): figs. 1, 3: Mark Morosse, The Photograph Studio, MMA; figs. 4–7: Courtesy of Congregation Emanu-El of the City of New York; figs. 8, 9: Robert N. Brown; fig. 10: Courtesy of Liberty Hill Baptist Church, Cleveland, OH, Robert N. Brown; fig. 11: Avery Architectural & Fine Arts Library, Columbia University

Drawing, Photography, and the Design of Tiffany Studios' *Te Deum Laudamus* Mosaic Triptych: fig. 1: Christine Olson; fig. 2: John C. W. Austin papers, Library Special Collections, Charles E. Young Research Library, UCLA; figs. 3, 5, 7, 8, 10, 12, 13: Mark Morosse, The Photograph Studio, MMA; fig. 4: Scott Geffert, The Photograph Studio, MMA; fig. 9: Collection of the Rakow Research Library, The Corning Museum of Glass, Corning, New York; fig. 15: Evan Reid

Photographic Portraiture in West Africa: Notes from “In and Out of the Studio”: fig. 3: © Estate of Mama Casset/Revue Noire; fig. 4: Hyla Skoptiz, The Photograph Studio, MMA, © Malick Sidibé. Courtesy of the artist and Jack Shainman Gallery, New York; fig. 17: © Malick Sidibé. Courtesy of the artist and Jack Shainman Gallery, New York; figs. 11, 13: Courtesy CAAC – The Pigozzi collection © Seydou Keita/SKPEAC; figs. 14, 18: Courtesy Oumar Ka; fig. 19: © Samuel Fosso 1976, Courtesy JM Patras/Paris