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ABBREVIATIONS
MMA The Metropolitan Museum of Art
MMAAB The Metropolitan Museum of Art Bulletin
MMJ Metropolitan Museum Journal

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Foreword

John M. Brealey was the Sherman Fairchild Chairman of Paintings Conservation at the Metropolitan Museum when, in the summer of 1989, he was immobilized and silenced by a stroke. He had arrived from London in September 1975, having worked privately on paintings belonging to Metropolitan trustee Charles Wrightman and his wife, Jayne, and having met John Walsh Jr., then in the Department of European Paintings, by whom his appointment had been recommended. At that time the departments of Paintings Conservation and European Paintings were in a dispirited state. Hubert von Sonnenburg, John Brealey’s predecessor, had departed to take up the directorship of the Doerner Institute, a distinguished conservation facility in Munich. Anthony M. Clark, chairman of the Department of European Paintings, had resigned, as had his successor, John Walsh, who became professor of the history of art at Columbia University. When John Brealey came to the Museum, these two important departments were understaffed with young people of limited experience.

In 1977 Sir John Pope-Hennessy, distinguished scholar in the field of Renaissance painting and sculpture and former director of both the Victoria and Albert and the British museums, was appointed to the chair of European Paintings. John Pope-Hennessy and John Brealey, very much at home in New York and dedicated to the pursuit of the Museum’s interests, worked to evaluate the collection and put it in order. The European Paintings galleries were enlarged and reinstated in the course of Sir John’s ten-year tenure. Additionally, the American Wing closed for remodeling, and hundreds of American paintings in temporary storage were prepared, under John Brealey’s direction, for its reopening in May 1980. The cycle of reinstallations was completed in February 1987 with the debut of a new wing and galleries for Twentieth-Century Art. In the meantime, working at the Prado Museum in Madrid in 1984, John undertook the cleaning of a Spanish national treasure, Velázquez’s Las Meninas. Three years later, the Metropolitan and the Prado entered into a collaborative agreement whereby John assumed responsibility for the reorganization of the paintings conservation department, the care of the collection, and the training of staff at the Prado, while still managing the department at the Metropolitan Museum.

Prior to his move to New York, John Brealey had worked in England for the Royal Collection and the National Trust, always on a freelance basis. His private practice in London was very successful, and he had recently completed the difficult restoration of Mantegna’s famous Triumphs of Caesar at Hampton Court Palace. He had strong feelings about the cleaning of paintings, and one of his aims in joining our staff was to set up a program for the training of students. While he did not write and was occasionally contemptuous of the written word, he was eloquent in pursuit of this and other goals. John was well known in London as an articulate opponent of the cleaning practices that had been initiated by Helmut Ruhemann at the National Gallery. He was equally opposed to the so-called scientific approach of the American conservation establishment, which was dominated by graduates of the conservation department of the Fogg Art Museum at Harvard University.

As John often explained, paint is an unstable substance, subject to the processes of deterioration. In the simplest terms, dark colors darken, with loss of detail in the shadows, while light colors fade or change, some more than others. Solvents, used to remove discolored surface coatings, cannot distinguish between the original paint and the varnish or wax, and in the wrong hands they can be damaging. Paraphrasing John, Calvin Tomkins wrote in a New Yorker profile of him that “the work of art—it’s tonal harmony, its internal structure, its convincingness as an illusion—can perish absolutely in the process [of cleaning].” While he nevertheless believed in the judicious application of modern scientific techniques, John’s approach was always that of a humanist, seeking to know as much as possible about both the artist and the individual work of art. John was a brilliant advocate for his profession, a fund-raiser, a teacher, and above all a uniquely gifted restorer: the broad sweep of his work brought many of the Metropolitan Museum’s paintings to life.

Philippe de Montebello
Director, The Metropolitan Museum of Art
Plate 1. John Brealey's first seminar for curators on the conservation and restoration of paintings, July 6-10, 1982. The Metropolitan Museum of Art. Counterclockwise from far right: John Brealey (standing), Maryan Ainsworth (partially hidden behind Brealey), Philippe de Montebello, Gregory Hedberg, Scott Schaeffer, Otto Wittman, J. Patrice Marandel, Joyce Pleslers, Gisela Helmkampf, Keith Christiansen, Frank Goodyear Jr., John Hand, Joseph Rishel (photo: Dorothy Mahon)

Plate 2. At the same seminar, clockwise from far left: John Brealey (wearing loop), Maryan Ainsworth, Alain Goldrach, J. Patrice Marandel, John Hand, Frank Goodyear Jr., Allen Rosenbaum, Irvine MacManus, Edgar Peters Bowron, Gisela Helmkampf, Joyce Pleslers, Keith Christiansen, Joseph Rishel (photo: Dorothy Mahon)
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John Brealey and the Cleaning of Paintings

“The way the picture looks is the picture.” John Brealey

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PART 1

Of all the interventions that works of art may undergo, the cleaning of paintings is the most contentious. And for good reason. A painting is irreversibly altered by cleaning, although some methods are gentler than others. When I was in graduate school in the early 1970s, I was taught to clean paintings according to a procedure which in its general principles had been developed at Harvard University’s Department of Technical Research at the Fogg Museum. The department was founded in 1928 under the direction of the esteemed Edward Forbes, and George Stout was its first conservator. The painting, whether small or large, panel or canvas, was laid on a table. Next to it were four preprepared solvents containing, in varying proportions, petroleum spirits, acetone, methyl alcohol, and diacetone alcohol; the two latter components are and were regarded as aggressive and penetrating. The conservator began in a corner of the work and, using cotton swabs dampened with the various mixtures, worked on small squares to determine which solvent removed the varnish most effectively. This surface coating was then removed, square by square; a square was regarded as clean when no dirt or oxidized resin appeared on the cotton swab. If color did appear, it was judged to be from a previous restoration, even if the distinction was difficult to detect under ultraviolet light or microscope. When possible, cleaning was done under magnification, with the use of a binocular stereo microscope. This method, combined with periodic examination of the surface with ultraviolet light to detect any telltale fluorescence, ensured that all traces of discolored varnish were removed from the surface.

Earlier restorers, who were usually also painters, were thought to have been able to mimic the original with uncanny skill using oil paint and natural resin. Attempting to restore form, they might glaze over original areas that had been damaged. The scientific approach promulgated by the Fogg in the 1930s and 1940s regarded this as dishonest. A conservator, a title considered as more accurate and professional than that of restorer, was guided by a code that confined retouching to areas of discrete losses. The term “inpainting” was coined to distinguish the work of conservators from that of restorers. At the Fogg, experiments had been made with techniques, such as hatching, that were immediately identifiable as additions to the original.

The painting was not considered as a work of art; an overall consideration was neglected in favor of a microscopic view. The reasoning was simple. Below the layer of varnish, the paint is composed of pigments and linseed, a translucent leathery compound produced over time by the polymerization of linseed oil, the most common of the drying oils employed as a painting medium. It was thought that linseed was “insoluble in such ordinary solvents as alcohol, turpentine, benzene, and kerosene, and [since] both Damar and Mastic [resins present in varnish] are soluble in these solvents, one can with care remove all varnish without disturbing the paint or glaze.” This hypothesis was, however, proved false by Nathan Stolow in 1961, when he presented research on the effects of commonly used solvents on relatively young paint films made with lead white and several types of linseed oil. He reached a startling conclusion: part of the paint film was removed each time a painting was cleaned. Stolow’s work was widely published; its importance was universally acknowledged, and thus it is all the more surprising that his findings went unheeded.

My teacher, as well as many others in this field, was unconcerned about this effect of cleaning, suggesting that the paint was like a stone wall, the pigment particles being the stones and the medium the mortar. A solvent which penetrated into this “wall” might remove tiny particles of “mortar” (medium) from the matrix but certainly did not cause the wall to be in danger of collapse. This analogy implied that material

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The notes for this article begin on page 35.
leached from the paint film was of no importance because, although the loss might be scientifically measurable, it was invisible under ordinary conditions. The only criterion for damage to the “stone wall” of the paint film was the appearance of pigment particles (“stones”) on the swab.

During varnish removal the painting sometimes becomes “blanched,” looking as if it were covered by a light frost. This change indicates that a once-continuous layer is being eroded. The paint film is no longer translucent but opaque, and light diffracts from the surface at altered angles, causing a blanched appearance. This phenomenon could indicate that the linoxyn was being leached of its more easily soluble components as Stolow’s experiments predicted. Another explanation, that put forward by Helmut Ruhemann, chief restorer at London’s National Gallery from the 1940s through the 1960s, was that blanching was in fact “remnants of the old varnish . . . probably [left behind] by the fast evaporation of the solvent.” 5 He held that residual resin deposits scattered the light unevenly and that the blanching could be removed by another pass, perhaps with a stronger solvent, to get down to the linseed oil and pigment layer which was considered impervious.

The general attitude was that a painting, like any other specimen, whether a bronze sword or circus banner, was nothing more than a cultural artifact. Those who did not agree with this approach were suspect. They were not conservators, professionals with an academic background trained in the correct scientific methods. Rather they were “restorers” (usually modified by “commercial”), a term that had a pejorative tone, and were not welcome in the American conservation establishment. Not every museum, however, accepted the scientific approach. There were whispers about Murray Pease, a Fogg graduate who had been removed from his position as paintings conservator at the Metropolitan Museum in 1957, because the chief curator believed that he had overcleaned El Greco’s masterpiece The View of Toledo, removing some of the final glazes. In 1959 Hubert von Sonnenberg came to work on the Metropolitan’s paintings collection. A young German art historian who had studied in Munich, he was one of the few pupils of Dr. Johannes Hell, a private restorer in London, known to be the most prudent of picture cleaners and an anti-Ruhemann. 5 In 1962 von Sonnenberg became the head of a separate department for paintings conservation located in a penthouse built for this purpose over the north wing of the Museum.

In 1974 von Sonnenberg left the Metropolitan to become head of the Doerner Institut in Munich. The following year John Brealey was appointed departmental chairman. He had a fine reputation in England where his clients included the Royal Collection, the National Trust, museums such as Edinburgh, Dulwich, the Fitzwilliam, and the Ashmolean, and important private collections. After years of work he had recently finished the complicated restoration of Mantegna’s Triumphs of Caesar in Hampton Court Palace to international acclaim. He too had studied with Dr. Hell.

Shortly after John finally arrived—it had taken him more than a year to close his practice in London—he
The transformation of drying oil into linoxyn takes place over a long period, decades rather than years. During this process the way the drying oil refracts light changes, and thus the relationship between the binder and the pigment, is altered. Dark pigments become significantly darker while the light passages, especially those painted with body color such as white lead, retain much of their original brilliance, becoming only slightly more yellow with drying. John compared this change in color relationships to the sounds made by a damaged piano which has a complete range of high and low notes but which has lost those in the middle. Even when a painting is in relatively good state, this tonal gap affects all the formal values. According to John, the restorer’s job was not to remove all traces of foreign material but to present a painting that reads convincingly despite the changes worked by time and interference.

While removing the varnish, John would often stand back to judge changes from a normal viewing distance. An important part of his approach was the constant application of a temporary varnish, especially during the cleaning of large canvases, so that the range of tones remained saturated. He rarely used the term “balanced cleaning,” but he often spoke of “holding back” in the lighter passages. Many people mistakenly thought this meant deliberately leaving yellow varnish, “selective cleaning” as it was later characterized by his critics. His actual habit was to refrain from persisting in the lighter and more colorful passages, a common temptation for a picture cleaner, and to pay attention to the darker, making sure they were not “bunged with stuff.”

After the initial cleaning and evaluation, the painting was taken to the photo studio and scrutinized under UV lamps. Residues of oxidized varnish fluoresced a characteristic light green, and these passages were circled with chalk. The painting was taken back into the daylight, and the patchy varnish residues were often cleaned locally. In some cases John added isopropyl alcohol to the solvent mixture, which he thought helped to “redistribute” yellow varnish over passages that were already too light or aggressive. John deplored patchy cleaning because it interfered with the development of form and space, and he was scathingly critical of the common practice, which he called “vignetting,” that is, neglecting the corners.

For John varnish removal was dictated by the painting itself rather than by a rigid system. Impressionist paintings, for example, have characteristically high-key palettes, and their surfaces were repeatedly gone over with solvent to remove all traces of discolored varnish and dirt that would have interfered with the freshness of the color and therefore with the artist’s
intent. The brushwork of the impasto was carefully cleaned out by softening the accumulations of resin and teasing them off the surface with a blunt podiatric tool and tiny swabs. In general, for paintings of all schools, old retouchings were usually removed. This was sometimes done under the microscope. Finally there was the “tidying up”: even after the surface appeared evenly cleaned under UV light, the restorer would go back and remove patches of grime or other residues that disturbed the progression of formal values.

As a student of Hell’s, John had strong views about the controversy at the National Gallery in London, which was provoked by the cleaning of Velázquez’s Philip IV in Brown and Silver in 1936 and was taken up again in 1946 with the return of the paintings that had been cleaned at various storage depots outside London during World War II. Many felt that the cleaning had been harsh and radical and that the pictures had been irreparably damaged. In 1947 the gallery mounted the didactic exhibition “Cleaned Pictures (1936–1947)” to justify its cleaning methods and to answer its critics. A well-known Hogarth etching, Time Smoking the Picture, was used as the cover illustration of the catalogue. In his writings Hogarth discussed alterations caused by time, a phenomenon that was perhaps Brealey’s greatest interest. Hogarth observed:

Let us now see in what manner time operates on the colours themselves; in order to discover if any changes in them can give a picture more union and harmony than has been in the power of a skilful master, with all his rules of art, to do. When colours change at all it must be somewhat in the manner following, for as they are made some of metal, some of earth, some of stone, and others of more perishable materials, time cannot operate on them otherwise than as by daily experience we find it doth, which is, that one changes darker, another lighter, one quite to a different colour, whilst another, as ultramarine, will keep its natural brightness. . . . Therefore how is it possible that such different materials, ever variously changing . . . should accidentally coincide with the artist’s intention? 7

The complicated effects of time described by Hogarth were ignored by senior members of the National Gallery staff who, with the support of science, were ready to demonstrate that nothing but later yellow varnish had been removed from the pictures in question. In spite of the “Cleaned Pictures” exhibition, numerous public defenses, and the favorable Report of a Committee of Confidential Inquiry into the Cleaning and Care of Pictures in the Gallery (Weaver Report), published in 1947, conservation work continued to generate controversy in England in the 1950s and 1960s. The views of the two camps—those who favored “thorough” cleaning and those who advocated a more moderate approach—are recorded in editorials, letters, and essays in such distinguished journals as the Burlington Magazine and the British Journal of Aesthetics. The leading spokesman for the opposition, Ernst Gombrich was harshly critical of Helmut Ruhemann, the principal advocate for thorough cleaning. Gombrich remained adamantly opposed to radical cleaning until his death in 2001. He was not a writer who liked dirty paintings; he rebuffed a critic who urged him to join the critical assault on the cleaning of the Sistine ceiling, saying that he had been up the scaffold and was fairly happy with the work. 8

In his running dispute with Ruhemann, Gombrich attacked the circular argument that “what resisted our solvents must have been a glaze, what dissolved was evidently only a varnish.” He posed a more sophisticated criterion, writing:

Surely when many independent observers agree that certain paintings now look stripped, harsh or incoherent after “cleaning” it is not sufficient to reply or imply that since none of the original pigments can be shown to have been removed these critics must obviously be enamored of dirt. . . . The whole problem of how we should cope with shifts in relationships is one of baffling complexity. What I want to argue against is only the simplicistic denial that there is anything problematic in radical “cleaning.” 9

No one was a more passionate adherent of this minority view than John Brealey.

Until Brealey’s arrival at the Metropolitan, the cleaning controversy had caused few waves in the United States—those who abhorred the radical cleaning at the National Gallery and elsewhere quietly pursued their own course. But suddenly there was an articulate and determined proselytizer who made good use of the bully pulpit of the Metropolitan Museum and who relished his role as a gadfly. An article in the February 1976 Art News, Sylvia Hochfield’s “Conservation: The Need Is Urgent,” brought John’s beliefs to a wider public. 10

In Hochfield’s research she had interviewed the newly appointed head of Paintings Conservation at the Metropolitan. John found her an intelligent listener who became something of a convert. Her text began with an observation by the French philosopher Étienne Gilson: “There are two ways for a painting to perish, the one is for it to be restored; the other is for it not to be restored.” 11 This oxymoronic statement was the foundation of the article, which offered long paraphrases of the author’s conversations with John Brealey.

Hochfield presented Brealey’s views about alterations due to time, the impossibility of returning to
the artist’s original intent, the dangerous and irreversible nature of cleaning paintings, the perils of overreliance on scientific apparatus, the usefulness of the graduate training programs, and the fallacy that conservation was universally beneficial. Echoing John, Hochfield wrote:

The paint film . . . undergoes chemical processes that transform the colors and thus destroy the original harmony of the picture, as if the chords of a symphony had turned to discord. Darker colors become even darker and more translucent with time, until subtleties of modeling and detail disappear in impenetrable shadow. . . . Looking at such pictures is like listening to a musical composition in which the bass notes are no longer audible. . . . If the colors changed equally, the balance of the picture would be maintained, but they do not. Some colors, such as ultramarine, change only slightly, others become lighter. The dulling of the darker colors makes the brighter ones too vibrant by contrast and the distortion of color relationships distorts the spatial relationships . . . areas of blue and red bounce out of the picture plane and shriekingly blue skies turn distance to flatness.12

But the battle was joined with this classic Brealey statement:

Pictures are terrifying in their demands on you. You cannot hope to do the right thing by an artist by simply removing discolored varnish and attending to the mechanical defects, reducing the work of art to a laboratory specimen. Everything that you do to a painting has esthetic consequences. It’s a matter of interpretation, not of hygiene. Many people can play the piano with technical proficiency, but that isn’t enough. A pianist stands or falls on his understanding of the composer’s intention. To pretend that it is not a matter of interpretation is incredibly naive, and it’s the same with a conservator. You’re faced with a great number of technical and esthetic anomalies—the picture is distressed physically, or it doesn’t read convincingly. It’s not just a question of retouching and dealing with thousands of defects. You have to be highly selective. You have to do the absolute minimum to recover a semblance of the painting’s original integrity. Of course, you have to know the scientific side. One takes that for granted—but it’s not enough. Technical problems are very important but they’re only 10 percent of the thing. The real problem is to understand the artist’s intention. If you don’t, everything you do will be subtly off.13

PART 2

John Brealey was an eloquent speaker and never more so than when talking about the cleaning of paintings. Like many other great conservators, he did not leave a written record,14 and, so far as I know, apart from an interview for an oral history project, none of his many discourses were taped. Shortly after I left the museum in 1987, I lunches with John. (He often joked that the title of his memoirs would be “Out to Lunch,” and in fact this daily ritual, invariably lasting two hours, was an important mechanism for spreading John’s ideas and initiating projects.) He loved to make people laugh, but on this occasion he became very serious and told me that some day I must write something about the cleaning of paintings, even if it had to be privately published. Since then I have read and lectured and continued to work on and look at paintings, applying the principles I learned from John and reflecting on them.

John Brealey did not invent a new approach but he was the most articulate spokesman for a humanistic, as he called it, way to clean paintings. In order to bring some sense to the ongoing confusion about cleaning, I have culled the sparse literature for what seem to me the most relevant historical and philosophical precursors for Brealey’s views, despite his assertion that nothing useful had been written in the past. I have included publications which attempted to rebut or rephrase his views. While John was aware of these articles, he dismissed them out of hand—John Brealey read Proust, technical literature bored him. I have tried to put Brealey into the larger context of the field of paintings conservation from the 1950s through the 1980s.

Hochfield’s 1976 article in Art News alarmed American conservators. Brealey’s challenge was quickly taken up, and the debate over the proper cleaning of paintings became heated. Much was said, though little was written. Emotions ran high, and as in the past, no satisfactory understanding was reached although for a period Brealey’s views imposed a certain amount of caution, especially at American museums.

By 1972, before Brealey’s arrival at the Metropolitan Museum, trouble was brewing at the National Gallery in Washington, D.C., over the cleaning of Rubens’s Gerbier Family, acquired the previous year from Geoffrey Agnew, a London dealer and a close friend of Paul Mellon, the president of the board of trustees. After its acquisition, the painting was sent to Richard Buck, one of the first graduates of the Fogg, at the Interimuseum Conservation Association in Oberlin, Ohio, for cleaning and restoration. Both Agnew and the Rubens scholar Michael Jaffé were outraged
by his work and considered the painting “ruined,” a term that critics do not use lightly.¹⁵ But as Gombrich observed, “When we historians make a mistake (as we often do) nothing much happens, for we can be corrected by other historians. The texts remain, after all, unaltered. With restorers the case is different. They must alter the texts themselves.”¹⁶

Does “overcleaning” a painting “ruin” it? Apologists for those accused in past cleaning controversies usually asserted that no original paint had been removed. However, the Burlington Magazine editorial of December 1947 regarding the cleaning controversy at London’s National Gallery pointed out:

> It is not sufficient always to dismiss taste contemptuously, it is not always sensible to clean dogmatically down to the paint. It is a matter of deciding which is preferable, in any particular instance: whether to reveal a frail fragment of truth, so worn and ghost-like as almost to fall into the category of falsehood, or whether to make do with a sturdy half-truth, by stopping halfway. And in cases where colours in the course of centuries have darkened or grown dim whilst others have kept their brilliance, it is a question of deciding whether misleading tonal contrasts are preferable to misleading dirt.¹⁷

This editorial acknowledged the essential dichotomy between those restorers concerned only with complete varnish removal and those primarily concerned with aesthetics. There was little further discussion of this issue, however, since few of those qualified to speak would dare suggest that masterpieces had been and were perhaps continuing to be spoiled by well-meaning professionals working for internationally renowned museums.¹⁸

In 1985, provoked by Brealey’s outspoken views, Gerry Hedley, professor of restoration at the Courtauld Institute, in an unpublished but widely circulated paper, formulated a set of distinctions which were immediately and almost universally adopted by Anglo-American conservators.¹⁹ He attempted to resolve the dispute by defining different, but equally valid, approaches to the cleaning of painting. His argument assumed that overcleaning does not mean that any original material has been removed and then divided conservators into three different types of cleaners: total, partial, and selective.

Hedley understood “total cleaning,” or “complete cleaning” (what Brealey contemptuously called archaeological or hygienic cleaning) to mean that all the varnish and dirt have been removed from the surface and that the restorer has cleaned down to the original paint. Hedley argued that this is the only truly objective method because “only by cleaning down to the original paint can we hope to evaluate the exact nature of an artist’s technique.” He dismissed, while not denying, the importance of allowing for alterations in color and tone because “at least with masterpieces greater nuances of form and handling and more bold use of color [are revealed by ‘total cleaning’].” Further, he argued that once a painting has been totally cleaned any changed relationships can be adjusted during the retouching (John Brealey believed that this was a distasteful practice which a restorer should resort to only when a painting was so damaged by cleaning that the final glazes had been removed).

Hedley’s second approach, “partial cleaning,” was practiced at the Louvre where the restorers left a uniform, thin layer of varnish over the entire painting. How this well-nigh impossible feat is accomplished is not explained. Finally, there is a third method, presumably that practiced by John Brealey, which Hedley calls “selective or differential cleaning” in which “an attempt is made . . . to restore the relationship of values believed to have existed in the original work. This is done by removing more of the discolored yellow varnish from some areas than others.” Presented in this manner, the method seems highly subjective and arbitrary. “The restorer must discover within the aged painting an ideal form (the original set of relationships) which no longer itself has an independent real existence. This type of Neo-Platonic approach is not verifiable . . . nor is it passive . . . since the form is to be created not merely recognized.”

Hedley was not the first to propose alternatives to total cleaning only to disparage them. Ruhemann himself had observed that some museum directors and curators, worried about damage done to certain later paintings, such as works by Reynolds and Stubbs, rejected “thorough cleaning” and opted for alternatives: semicleaning or part-way cleaning (Hedley’s partial cleaning), undercleaning (leaving discolored varnish in the brushwork), or artistic cleaning (cleaning only the light passages).²⁰ He condemned the latter practices, and drawing on a lifetime’s work on paintings, his defense of complete cleaning is informed by many practical details that Hedley’s highly theoretical thesis lacked. The simplistic categories of “total,” “partial,” and “selective” cleaning were appealing to those who felt that conservation should be objective and scientific and were both confused and offended by John Brealey’s insistence on humanism, sensitivity, and aesthetic values. Even after twenty years Hedley’s labels have tended to stick in one form or another.²¹

Long before the American cleaning debate, a sophisticated model for the cleaning of paintings had been presented by Paul Philippot, an aesthete and son of the great Belgian restorer Albert Philippot.²² His essay “La notion de patine et la nettoyage des
“paintures” appeared with little fanfare in the quarterly journal of the Institut Royal du Patrimoine Artistique in Brussels. It is informed partly by the ideas of Cesare Brandi, the Italian art historian and aesthetician who founded Rome’s Istituto Centrale di Restauro and wrote the somewhat hermetic Restauro: Teoria e pratica (1978). But more importantly Philippot had a knowledge of a restorer’s experience in front of a painting. Philippot’s essay was available only in French until it was included in the Getty Institute’s 1996 compilation of essential readings in conservation. The language barrier may have caused his elegant thesis to be neglected for so long by the mainly Anglo-American partisans on both sides of the cleaning controversy. Philippot, however, presents in a nutshell the principles of cleaning espoused by John Brealey and others.

He begins with the following assumption: “In the case of paintings certain transformations occur naturally over time that are totally irreversible.” These changes include: development of craquelure; increasing transparency as the binding medium dries; heightened contrast between these transparent areas and the relative opacities of less developed areas; alteration of certain pigments; yellowing and loss of transparency of the oxidized varnish; and exudation of the binding medium toward the surface.

Philippot argues that it is therefore impossible to “re-establish or even to determine” the way the painting looked when it was created. The so-called patina of a painting is the sum of these normal deterioration processes and is not a scientific but a critical concept. The restorer must therefore make an aesthetic judgment when cleaning a painting because the alteration of the old, not necessarily original, varnish “can attenuate the effects of damage or increased contrast.” To pretend that judgment can be put aside and an entirely objective method adopted by completely removing a deteriorated varnish is in itself a “manifestation of taste” and therefore subjective.  

For Philippot, the cleaning of paintings, like connoisseurship, is not based on intuition but a rational thought process which includes a knowledge of the evolution of materials as well the experience to be able to distinguish actual damage from patina and to form an idea about the original appearance. There is, odd as it may seem, a scientific process for arriving at aesthetic decisions and judgments about the “original unity.” Factual knowledge, comparison, and keen observation allow the conservator to measure alterations based on how they affect forms. Every cleaning is different. Maintaining veils of varnish is useful for some paintings and not for others (those, for example, where there has not been much alteration). This is not to say that cleaning should be approached hygienically because all paintings have at least a slight patina. Philippot continues:

Cleaning then becomes the search for an achievable equilibrium that will be most faithful to the original unity. And it is clear that the solution must be arrived at on a case-by-case basis. The cleaning of a painting can thus never be conceived of as a purely material operation and as such, “objective”: the elimination of varnish—and eventually of overpainting—that recovers the original layer. To clean a painting is to proceed, on the basis of as exact as possible a preliminary knowledge of its present condition, toward a condition that, without violating the original material, more faithfully restores the original image. This progression ultimately implies the capacity to foresee the final result, for without this it is impossible to know when to stop, and cleaning then becomes a blind hunt for a treasure that will only end with the original material (and not always that!). In fact, the veil that an ancient varnish carries will generally be quite valuable when there is a question of offsetting heightened contrast or balancing worn areas with those that are intact, yet cleaning can usually be taken much further when alteration due to patina is minimal. In this case however, one must also take into account the fact that radical exposure of the original pictorial layer almost always accentuates its materiality to the detriment of the image, and that bestowing a new appearance on an ancient object can create a discord within the work of art that is a kind of falsification. It emphasizes the material to the detriment of form, and indicates the predominance of a hygienic interest in the object over an aesthetic interest in the image.  

Many scientific studies of the effects of solvents on oil paint, particularly those of Stolow, confirm Philippot’s conclusion: “the migration of the binding medium toward the surface in the course of drying... may very well be altered by excessive cleaning long before this is revealed by a loss of pigment.” It is essential to respect the translucent skin of the linosyn layer. When this skin is broken, “a wound is opened through which color appears with the same materiality it has on the palette, interfering with its own formal transfiguration in the image.” Such a violation changes the surface of the oil paint film, leaving the familiar ravaged look.

Another argument against “total cleaning” is the effect of the interaction between a solvent-based varnish and a young paint film. Examining a paint cross section, Richard Wolbers noted in 1985 that the boundary between paint and varnish was ambiguous, not a clear-cut interface similar to that between the layers of an onion.  

Other researchers have since shown that some varnishes act on paint films in much the same way solvents do: they extract the same soluble
components and cause the same embrittlement and disruption of the oil film. One of John Brealey’s essential beliefs was that varnishing was the root of the “vicious cleaning cycle.”

Contemporary texts from every period, paint sample analysis, and experience indicate that the materials used in painting and the manner in which they were employed were exceedingly complex. The varnishing of an oil painting was by no means straightforward or uniform. Artists had a strong interest in the optical properties of their paintings which were affected by factors other than lighting conditions. Some pigments, such as the darks, are poor dryers and require more medium, while others, like lead white, retain their original luminosity. Selective varnishing was often used to saturate areas which had sunken and become matte. As Helen Glanville points out in her excellent essay on the use of varnish in seventeenth-century Italy, an absorbent ground was, on the one hand, desirable, because it soaked up some of the excess oil which caused yellowing and therefore made the colors fresher, but was, on the other, problematic, because it caused sinking in of colors. Documentary sources indicate that there was a preference for a more matte appearance of certain colors, such as blue which was often applied with an aqueous medium.

At times, in paintings in excellent condition, the varnish is bound to the paint in such a way that its removal will affect the subtleties of the final modeling. The famous amber varnish of the De Mayerne manuscript may indeed be present on Orazio Gentileschi’s Lot and His Daughters in the J. Paul Getty Museum. The published research identified a copal resin but was not able to exclude varieties from anachronistic sources. No claim was made that the “amber” varnish on the Gentileschi was tinted. Sarah Walden confuses this vexed issue when she writes that “The Getty provided new evidence that many of the harsh blue skies and raw bright faces we have become accustomed to in restored Old Masters today, not least in the National Gallery, would originally have been veiled by glazes or tinted varnishes.”

The use of patina by painters, particularly in the eighteenth and nineteenth centuries cannot be dismissed. Recently the conservation department at the Philadelphia Museum was able to demonstrate the existence of a real patina, a gray final pigmented layer applied to alter the tone of certain colors, in the work of the American painter Thomas Eakins and there may be other instances.

The practice of using an intermediate varnish layer between stages of eighteenth-century painting is well recorded, as is the addition of varnish to the medium in nineteenth-century painting. Some paintings are so soluble that they cannot be cleaned at all without injury to a corrupt medium that contains soft resins and often balsams, waxes, essential oils, and other soluble ingredients. This is particularly true of many eighteenth-century English paintings such as certain works by Stubbs and especially by Reynolds, who recorded his own experiments with various mediums. John Brealey often talked about paintings by J. M. W. Turner, an artist whose work he knew well and loved, who employed all manner of materials and habitually interlayered watercolor and oil with noticeable alterations, recorded by Ruskin, occurring soon after the painting left the artist’s easel. Paintings of the nineteenth and twentieth centuries are rife with experimental techniques, mediums, and materials.

The restorer is always standing on shaky ground, not infrequently undermined by the work of his predecessors. In the past the use of caustic solutions to remove stubborn oil varnishes was common. Such alkaline reagents can saponify even fully polymerized drying oil films, and the tragic damage from past cleaning with “soda” is widespread. Essential oils, sometimes used in cleaning solutions, remain in the paint film, softening it over time and making it vulnerable to even mild solvents. The use of slowly evaporating solvents (such as dimethyl formamide, pyridine, cellosolve, and butyl acetate) can also have a deleterious long-term effect since they work slowly and deeply, leaving pigment particles in suspension.

The belief that there are two equally valid approaches to the cleaning of paintings—total or partial—is simplistic and uninformed. It is appalling to see surfaces so raw that the skin or enamel of the original paint must have been violated. Monographic exhibitions, which often include some works cleaned for the occasion, are telling about the state of restoration. In a recent old master exhibition one work had been so strongly cleaned that it stood out from all the other pictures and had to be toned down by using a yellow filter over its spotlight.

Every painting is different and must be approached without preconceptions. Cleaning a painting always involves some risk. It should only be undertaken for a compelling reason, for example, the expectation of significant gain in meaning. One might wonder which present practices critics will be lamenting fifty years from now. As John Brealey often said, “Pictures always make a fool of you.”
NOTES


2.04 PREPARATIONS FOR CLEANING PAINT

- Support[ing] the picture properly to avoid damage by pressure
- Providing adequate illumination. Strong white light such as direct sunlight gives the best visibility and should be used whenever possible. . . . The parts of the picture that are not being treated should be covered to protect them from light and heat
- Providing suitable devices for magnifying. A binocular loupe is often useful because it increases the effect of depth, magnifies slightly, and permits working closer to the picture. A low-power binocular microscope is useful for examination and for cleaning difficult details.
- Providing adequate ventilation and covered containers for solvents and waste cotton
- Arranging the equipment so as to permit maximum safety and efficiency

2.111 FIRST METHOD

- A solvent or solvent mixture is chosen. If one that dissolves the coating without affecting the paint cannot be found, one should be chosen that affects the paint as slowly as possible. . . .
- A swab that is moistened with the solvent is rolled over the first areas to be cleaned. If the solvent can be used safely on the paint for a moderate length of time, it is applied liberally so that the coating will be dissolved quickly. . . . If the solvent rapidly affects the paint, it is used sparingly. . . .
- The coating is taken off in adjacent areas. The areas are not overlapped so that the paint will not be exposed to the solvent twice in rapid succession. . . .


13. Ibid., p. 31.


15. The controversy at the National Gallery of Art, Washington, D.C., became increasingly heated and broadened to include a number of other paintings, the most well known of which was Rembrandt’s The Mill. John Brealey’s role in the controversy is still misunderstood. The story is perhaps worth recounting in a separate paper. Briefly, Paul Mellon asked that Agnew, Jaffé, and the restorer Mario Modestini visit the gallery. After the highly critical Agnew and Jaffé reports had been submitted, the gallery declared a moratorium on cleaning. The staff was alarmed and turned for support to a professional organization, the American Institute for Conservation. Eventually a panel was nominated to evaluate the work done at the gallery. Although the decision was not unanimously in favor of the conservation department, the majority opinion was favorable, and the gallery declared itself satisfied with the work accomplished by its staff. The two exceptions were The Mill and The Gerbier Family. On the advice of Mario Modestini, the excessively pale sky of the Rembrandt was toned down to balance better with the darkened foreground. The Rubens group portrait was ultimately sent to Mario Modestini in New York. Modestini says that the painting was severely overcleaned. The final scumbles had been removed from the flesh tones, revealing the grey imprimatura so that the lower cheeks and jaws of all the sitters seemed to be bearded. There were inconsistencies in the other passages related to different types of canvas that had been cobbled together to make the support—a common practice of Rubens. Modestini removed Bick’s varnish and retouching and did extensive work on many areas of the painting, especially the flesh tones, hair, sky, and areas of the satin. The painting was quietly put back on exhibition.


18. From my own experience, and that of colleagues at other museums, it is possible to demonstrate, using archival photographs, that original paint was often removed. At the Metropolitan Museum of Art passages from some paintings were scraped off by the Conservation Department while it was under the direction of Fogg graduate Murray Pease. This happened especially when paintings were already damaged and much restored. For example, Atalanta and Meleager, a work on panel by Rubens, had once had at least remnants of a cord across the youth’s chest that was tied to his cloak. From a conviction that this was repaint, it was scraped off, presumably with great difficulty. On another occasion, when Mario Modestini was restoring El Greco’s Vision of Saint John, Murray Pease came to discuss the work. Pointing to a thick passage of copper green drape which was pooled on the
surface like enamel. Pease said that it would have to be scraped off. A complete set of X radiographs had been made of the painting which clearly showed numerous losses under the repaint. Modestini showed Pease the evidence of fragmentary remains of the hands and arm of the putto holding the suspect drape. The green was in fact original and, when the painting was restored, made perfect sense.


23. Ibid., p. 375.

24. Ibid., p. 376.


28. Mark Leonard, Narayan Khandekar, and Dawson W. Carr, “‘Amber Varnish’ and Orazio Gentileschi’s ‘Lot and His Daughters’,” Burlington Magazine 143 (January 2001), pp. 4–10. The resin was not present over the entire surface. This argues in favor of its authenticity since it is consistent with Baldinucci’s comments that artists varnished only locally. Even if not an “original” varnish, a first full varnish applied to a lean paint layer, that is, one containing a high proportion of pigment to binder, not too long after the painting has been finished, might penetrate in such a way that it could not be removed later without affecting the final glazes.


The strongest evidence for an original varnish is the paint cross sections that show that a layer of copal varnish does not extend into cracks and therefore must have been applied when the paint film was still relatively young.


For thoughtful people restoration poses many difficult questions that do not allow for glib answers: Who should undertake the work and who should bear the ultimate responsibility? What materials and procedures should be used? How far is too far? Who are the just judges? Criticism of restorations is not a new phenomenon. Scholars, historians, artists, collectors, and other interested parties have always had plenty to say on the topic. Published critical assessments and expert opinion flourished from the sixteenth century onward. With the nineteenth century and the emergence of the public museum, however, a much wider audience was engaged. Today, the sheer rapidity and volume of modern communications result in instant analysis of restoration projects before they are completed, and sometimes before they are even begun. When a restoration is condemned as being irresponsible and even damaging to a work of art, little time is given to an informed public discourse. Laypeople hear only, “Yes, it’s bad; no, it’s good,” leaving them unable to evaluate complicated issues such as those raised by the cleaning of the Sistine Chapel (see below). Attempts at meaningful dialogue are often frustrated by participants who muddy troubled waters with innuendo and mendacity.

An early attack on restorations appears in Richard Haydocke’s English translation of Giovanni Paolo Lomazzo’s Trattato dell’arte della pittura (1584). In his introduction Haydocke mentions that he has seen “divers goodlie olde warkes finelie marred, with fresh and beauffull colours, and vernisches: a singular argument ... of the bolde and confident ignorance of the workemen.”4 According to the anonymous author of The Excellency of the Pen and Pencil (1688), “Divers there be which have pretended to be well skill’d or knowing in the Cleaning of Pictures, and skill in Painting; and have undertaken the spoiling of things they have been unworthy to understand; as with Sope, or Ashes, and a Brush, and divers other inventions, by their ignorance to deface and spoyle those things which otherwise might have been worth great value.”5 During the eighteenth century condemnation of restoration and restorers intensified. Joseph Highmore, an English portrait painter, visited Paris in 1734 and recorded in his journal that some of Rubens’s paintings in the Marie de Médicis series had been “injured by injudicious cleaning & mending.”6 In 1754 James Burgess, in the preface to his translation of some artists’ biographies excerpted from the work of Antoine Joseph Dezallier d’Argenville, faults the damages done by restorers and notes how unscrupulous dealers take advantage of buyers, selling them copies or ruined pictures. He disparages overpainting and laments those canvases that are “so painted over, that the real charms, like those of a French beauty, are entirely hid beneath the artificial repairs.”7

A vitriolic condemnation of restoration is given by the anonymous author of An Essay in Two Parts, on the Necessity and Form of a Royal Academy (1755): “I seldom see a Collection of Pictures, but I see the Woeful Effects of their having been cleaned. Pictures, which I once remembered finished to the greatest Perfection, though perhaps a little Dirty, I now find cleared of both Dirt and Finishing, and are no better than dead Colouring. I am persuaded there have been more Pictures destroyed in England by cleaning within these twenty Years, than in the whole World besides for this last century, by all Accidents whatsoever.”8 This strident assertion has a contemporary ring to it. Regrettably the author did not include examples to support his accusation, as there was much truth in it. In the introduction to his monumental two-volume compendium on materials and techniques of painting (1758), Robert Dossie observed that “no lover of the polite arts can reflect, without utmost regret, on the vast havoc made in the works of all the great masters, by erroneous and faulty management in [cleaning].”9 He offers much good advice and cautions that cleaning “has been very little understood even by those who profess to practice it.”10 Those who do are advised to determine the nature of the varnish that has to be removed before proceeding. Scouring surfaces with
Figure 1. William Hogarth (English, 1697–1764). *Time Smoking a Picture*, 1761. Etching and engraving, 23.5 x 18.4 cm. The Metropolitan Museum of Art, Harris Brisbane Dick Fund, 1932 (32.35)
abrasive substances is condemned, and Dossic discusses the pros and cons of various solvents. He stresses that great care should be exercised in the application of cleaning agents.

James Northcote in his *Life of Sir Joshua Reynolds* (1819) states that “it is by frequent and injudicious cleaning, and not by time, that pictures are destroyed.” Reynolds himself, however, was responsible for a number of widely condemned restorations of old master paintings. A revealing insight into his “restoration ethics” is provided in a 1786 letter to Lord Ossory. Ossory owned a painting that Reynolds believed to be a copy by Titian himself of his *Venus and Adonis*, then in Palazzo Colonna. In Reynolds’s opinion, the painting was too damaged to restore properly, and he told his patron that “the picture cleaner will only make it ten times worse.” Reynolds wanted to exchange a painting for the Titian so he could work on it himself: “I am confident I see the true Titian through the yellow dirty Paint and varnish with which the picture is covered. If it was mine I should try to get this off, or ruin the picture in the attempt. It is the colour alone that can make it valuable.” Northcote recounts that “in Reynolds’s investigations . . . into the secrets used by the old painters, he was indefatigable. I remember once, in particular, a fine picture of Parmegiano, that I bought by his order at a sale, which he rubbed and scoured down to the very pannel on which it had been painted, so that at last nothing remained of the picture.”

Northcote also mentions that Sir Joshua conducted experiments on “several ancient paintings of the Venetian School,” attempting to analyze “the chymical mixture of their various tints.” In their *Century of Painters of the British School* (1866) Samuel and Richard Redgrave recorded the statement of one of Benjamin West’s pupils who owned paintings by Rubens and Titian. When they had belonged to Reynolds they “had been scraped or rubbed down to the panel, to lay bare the under-paintings or dead-colouring.” It can be legitimately argued that Reynolds was the father of scientific investigation into old master materials and techniques. Should we be foolish enough, however, to suppose that Reynolds’s excessive curiosity and resultant barbarous experiments were particular to him and his time, we need only think of the devastation of the Jarves collection of Italian primitives carried out at the Yale University Art Gallery in the 1960s and 1970s. This undertaking was presented by the museum as “efforts of the 20th century to make clearer the quality of the originals by removing repaints and reestablish their authenticity by recognizing a fragment honestly as a fragment.” The museum did not reveal that original work had been cleaned away with the repaints. The remaining “boldness of the preparatory drawing” was deemed a sufficient reward for this program. Within the last ten years another restoration project was initiated to pull together the Jarves paintings through sensitive inpainting. No matter how well this work is executed, however, the extent of the losses guarantees that Humpty-Dumpty won’t be put back together again. Many in the conservation community have advocated the use of reversible restoration materials and procedures. But the removal of varnish and inpants from a painting’s surface is not reversible.

As the eighteenth century progressed, people other than artists, collectors, and connoisseurs became interested in paintings and their care. Public museums were founded and with them came unprecedented access to artistic treasures. In 1796 a bitter debate broke out in Paris over the Louvre’s restoration of paintings confiscated by Napoleon for his museum. According to Max J. Friedländer, “To defend themselves against this reproach, [the Louvre] wanted to exhibit a Perugino and a Carracci, half-cleaned”—in the hope of demonstrating to the public what would be gained by their restoration. Restoration committees were about to be born. As we know, committees are political in nature and are often used to diversify responsibility. Skeptics may believe that committees are appointed to rubberstamp foregone conclusions. In fact good restoration committees, which most are, bring together experts to explore complicated issues in order to ensure, as much as possible, that the decisions made are the right ones.

The restorer Sig. Pietro Edwards served as superintendent of paintings in Venice during the late eighteenth and early nineteenth century. An enlightened man, he was one of the pioneers of modern conservation. A manuscript by his son, Giovanni O’Kelly Edwards, records his father’s investigations into damages done by incompetent artist-restorers to Venice’s pictorial legacy. Pietro Edwards also placed blame on the keepers of paintings who had neglected their care. His philosophy may have persisted in the 1816 decision of a Venetian Academy committee to reject a proposal to restore two hundred and fifty paintings that had recently been given to the academy.

As the nineteenth century proceeded, attacks on restoration became more heated. In London the first National Gallery cleaning controversy began in 1846. The gallery’s first keeper, William Sequier, who was also a restorer, was succeeded by Sir Charles Lock Eastlake in 1844. Artist and authority on old master painting materials and techniques, Eastlake initiated a scientific cleaning program. Sequier had used his own gallery varnish, a concoction resembling tobacco juice, which was made from mastic resin and boiled
linseed oil and was intended to protect the paintings from London’s polluted atmosphere and give them the desired “golden glow.” In fact it increasingly darkened and obscured the surfaces. After Eastlake had the varnish removed, Morris Moore, a young artist cum picture dealer, who had ambitions to become the gallery’s keeper, wrote vituperative attacks on Eastlake in the Times of London on October 29 and November 19, 1846. Eastlake resigned in 1847, but in 1853 a select committee of the House of Commons had the good sense to appoint him the National Gallery’s first director. For good measure, the committee denounced the use of the gallery varnish. Other notorious National Gallery cleaning controversies occurred in 1936–37 and 1946–47. Today the National Gallery and many other renowned institutions are attacked on a regular basis by opponents of their restorations.

Color: Time and Dirt

Perhaps the two most significant issues in restoration are original condition and patina. Artists, art historians, collectors, connoisseurs, and conservators have long been aware of, and valued, original condition, or at least a good state of repair. Many believe that uncleaned pictures, with their patina, express the creators’ original intent. For them, time is the great harmonizer. In a 1711 Spectator Joseph Addison made a case for the beauties aging bestows on paintings. Father Time “wore off insensibly every little disagreeable Gloss that hung upon a Figure. He also added such a beautiful Brown to the Shades, and Mellowness to the Colours, that he made every Picture appear more perfect than when it came fresh from the Master’s Pencil.” Many colors fade or tone down as time passes, and, yes, time can provide a new harmony that was not present when an artist finished his/her work. But indiscriminate aficionados of “patina” forget that if good artists had wanted less gloss, deeper shades of brown, or more mellowed colors, they would have given these qualities to their pictures. Until the twentieth century artists were masters of materials and techniques and knew how to use them to paint the effects they wanted to achieve. They did not need the help of Father Time. Real patina is, however, an integral part of the past’s legacy and is rigorously respected and preserved by professional conservators. However, when we look at a faded Gobelins tapestry, we see a drab harmony conferred by time. Call it patina, or call it fading, but do not call it original condition. If you want to get close to that, look at the back of the Gobelins with its bright, not to say garish, colors. Gobelins tapestries cannot regain their original appearance, and paintings cannot regain their original freshness. Responsible restoration of paintings does not involve obscuring real patina through a rejuvenation of faded colors by overpainting.

Dürer was by no means alone in his concern for maintaining the freshness of his paintings. Writing to his patron Jacob Heller in 1509, the artist said, “I have painted [the Assumption of the Virgin] with great care, as you will see, using none but the best colors I could get. . . . Since you will keep it clean I know it will remain bright and fresh 500 years, for it is not done as men are wont to paint.” Jonathan Richardson Sr., an eighteenth-century portrait painter and more importantly the author of some of the most influential books on connoisseurship ever written, was disturbed by the coloring in Raphael’s Stanze frescoes. He found it “Blackish, and Disagreeable.” However, he was uncertain “whether ’twas so at First, or Chang’d by Time.” Throughout his Account of the Statues, Bas-Reliefs, Drawings and Pictures in Italy, France &c., first published in 1722 with a second edition in 1754, Richardson repeatedly criticized paintings and frescoes that are “blackish” and “bricky” in coloring, either because of the artist’s palette or the effects of time. While censorious of dark and/or dirty paintings, Richardson valued time’s “mellowing” of statues. He cites the Medici Venus as having “turn’d a little Yellowish; a Beautiful Colour; the Effect of Time.” He also appreciated the sandy white marble of the Farnese Hercules, but he remarked that Bernini’s Daphne and Apollo needed to mellow.

Writing in 1764, Count Francesco Algarotti discusses the effects of time on paintings:

But whatever pictures a young painter may chuse to study the art of colouring upon, he must take great care that they are well preserved. There are very few pieces, which have not suffered more or less by the length, not to say injuries, of time; and, perhaps, that precious patina, which years alone can impart to paintings, is in some measure askin to that other kind, which ages alone impart to medals; inasmuch as, by giving testimony to their antiquity, it renders them proportionally beautiful in the superstitious eyes of the learned. It must, indeed, be allowed, that, if, on the one hand, this patina bestows, as it really does, an extraordinary degree of harmony upon the colours of a picture, and destroys, or at least greatly lessens, their original rawness, it, on the other hand, equally impairs the freshness and life of them. A piece, seen many years after it has been painted, appears much as it would do, immediately after painting, behind a dull glass.”

Burgess discusses how time and restorations change the appearance of paintings. They “are destroyed by
the injuries of time” and “have suffered greatly by cleaning and repairing.” Although he was one of the most vociferous critics of restoration, both of architecture and of painting, John Ruskin supported Eastlake’s restorations at the National Gallery with the exception of the work done on Rubens’s Peace and War: “I have no hesitation in asserting that for the present it is utterly, and for ever partially, destroyed. . . . It was in the most advantageous condition under which a work of Rubens can be seen; mellowed by time into more perfect harmony than when it left the easel, enriched and warmed without losing any of its freshness or energy.”

When he was in Naples in 1826, the painter Thomas Uwins was saddened by the condition of the cathedral’s cupola “much injured by time.” Uwins added that “its beauties must depend much on the imagination of the person looking at it.” In 1828, again writing from Naples, Uwins mentioned that some English artists in Italy at the time, among them Sir David Wilkie, R.A., “have taken up notions of painting very different from those entertained by their London brethren. They have supposed that the works of the Old Masters do not owe their depth to time, but that they were originally painted on a tone and scale of colour very different from the modern practice. The truth will probably be found to lie between.”

In his Roman journal for 1829, Stendhal states that Titian’s Martyrdom of Saint Peter Martyr (1526–30), in Venice at the time, was being spoiled, not harmonized, by sunlight. And when the author saw a Russian artist making a copy after Raphael’s School of Athens, he found its bright colors allowed the viewer “to understand perfectly the text of an ancient author.” In comparison the original was “dulled by three centuries of existence.”

More than imagination is needed to see through the damages caused by time and accumulated dirt. Training, of the kind painters traditionally received, and experience are indispensable. In his Second Discourse, delivered before the Royal Academy in 1769, Sir Joshua Reynolds affirmed that “an artist whose judgment is matured by long observation, considers rather what the picture once was, than what it is at present. He has by habit acquired a power of seeing the brilliancy of tints through the cloud by which it is obscured.”

In the memoir of his friend John Constable first published in 1843, Charles Robert Leslie recorded an exchange between the artist and Sir George Beaumont, a renowned art patron and amateur landscape painter. Leslie observed that “a constant communion with pictures, the tints of which are subdued by time, no doubt tends to unfit the eye for the enjoyment of freshness.” On one occasion Beaumont, who was working on a landscape, used a painting by Gaspard Dughet as a model, to help him achieve subdued tints in his own picture. Constable asked his friend if he thought Dughet “would know his own picture in its present state? or if he did, should we not find it difficult to persuade him that somebody had not smeared tar or cart grease over its surface, and then wiped it imperfectly off?” Both Algarotti and Constable advised artists to turn to nature, not dirty pictures, to achieve truth in their coloring.

One of the unhappier aesthetic dicta—“A good picture, like a good fiddle, should be brown”—was given voice by the connoisseur Beaumont. This philosophy had a profound influence, which still lingers in some quarters, on how viewers thought old master paintings should look. When Beaumont shared his bon mot with his friend Constable, Constable took him outside and placed an old fiddle on the green lawn. Beaumont, however, did not allow empirical evidence to get in the way of prejudice. Leslie records an incident that took place at the Royal Academy on one of its varnishing days. Sir Francis Chantrey, R.A., brushed a heavy glaze of asphaltum, a tarry black solution, over what he found to be a cold foreground in Constable’s Hadleigh Castle. After remarking “there goes all my dew,” Constable wiped off Chantrey’s ill-judged addition.

It must be stressed that a great number of writers on art, whether artists, collectors, connoisseurs, or theorists, have strongly preferred lighter rather than darker pictures. They have hoped to see paintings unobscured by poor light, darkened varnishes, and bad restorations. An anonymous sixteenth-century writer on paintings in Italian private and ecclesiastical collections commended two paintings in the collection of Antonio Pasqualino in Venice. These portraits by Gentile da Fabriano “are very bright and full of spirit, highly finished, and shine like oil pictures, and are altogether worthy of praise.” In his Microcosmo della pittura (1657), Francesco Scannelli, noted that Guido Reni, Rubens, Albani, Pietro da Cortona, and Guercino all changed to a lighter palette later in their careers. Many collectors, according to Scannelli, considered Guercino’s earlier, very dark paintings unfinished. Giovanni Pietro Bellori in his Vita de’ pittori, scultori et architetti moderni (1672) preferred Caravaggio’s early paintings with their “sweet and pure color.” With these paintings he “made the greatest achievements and proved himself to be the most excellent Lombard colorist.” The sorry condition of Raphael’s Psyche frescoes at the Villa Farnesina, open to the elements for a century and a half, was
deplored by Bellori in his *Descrizioni delle immagini dipinti da Raffaello d’Urbino* (1751). The colors had “lost all . . . vivacity” and “all the grounds . . . had become so black, that one could hardly tell that they had been painted with good azure.”34

In his 1722 account of works that he saw in Italy and France, Jonathan Richardson Sr. takes delight in brightly colored paintings, among them Correggio’s cupola in Parma’s cathedral; works by Andrea del Sarto in the Pitti; a copy after Raphael’s *Madonna del Pesci*; Van Dyck’s *Cardinal Guido Bentivoglio*; and the frescoes by Lanfranco and Domenichino in S. Andrea della Valle, Rome.35 Dark paintings held no charms for Richardson. At Fontainebleau he thought Primaticcio’s paintings “Blackish, Brickly, and Disagreeable.” The coloring of the frescoes, restored by Guido Reni, in the Chiostro di S. Michele in Bosco in Bologna, was “Bricky, and Thick, and consequently not agreeable.” Francesco Albani’s *Baptism of Christ* in S. Giorgio, Bologna, was “very black” and the church poorly lighted. Paintings by Guercino in Rome at S. Agostino, Palazzo Spada, and St. Peter’s were in the “Dark Manner, very disagreeable, and Spoil’d.” Richardson states that Italians preferred Guercino’s dark manner, but “for my own part his Gay Manner is more to my Taste.” Raphael’s Galatea fresco in the Villa Farnesina “is now so Black that it looks intolerably Heavy.” In the Vatican Stanze Richardson found the light extremely poor and the coloring in Raphael’s frescoes “Blackish, and Disagreeable; whether ‘twas so at First, or Chang’d by Time.” Shadows in Raphael’s *Transfiguration*, then in S. Pietro in Montorio, had “turn’d Black.” In the same church Sebastian del Piombo’s *Flagellation* had a “Bricky Dirtiness like Red Clay.”36 While Dezallier d’Argenville admired Domenico Fetti’s forceful manner, he found his works “sometimes too dark.” He praised the Dutch painter Jan Asselijn, who had studied in Rome, for reforming “the dark brown manner [the Dutch artists] had hitherto followed.”37

When Charles de Brosses, a French writer and magistrate, was in Rome in 1739, he found Raphael’s portrait of his mistress in Palazzo Barberini perfectly colored. At Palazzo Colonna, he was surprised to find a brilliantly colored Mater Dolorosa by Guercino, and he praised the lively color in the artist’s *Aurora* in the Casino Ludovisi.38 Comparing Annibale Carracci’s frescoes in Palazzo Farnese to those by Raphael, he preferred the coloring and condition of Carracci’s works.

In the 1680s, commenting on Carlo Maratta’s restoration of Raphael’s *Psyche* frescoes at the Villa Farnesina, Dezallier d’Argenville had found that the “ultramarine gives a dryness to the figures, . . . and the carnations look of a brick colour, which takes away entirely the union of the figures with the ground.”39 He also reported that Maratta had used watercolors at the Villa Farnesina “so that the whole may be wiped off with a sponge.”40 Some sixty years later de Brosses found Maratta’s retouchings and use of ultramarine for the background had rejuvenated the coloring.41 And some ten years later Richardson was certain the original coloring had been “Harsh, . . . Brickly, Thick, [and] Heavy.” He thought Maratta’s “Fierce Blue of the New Skies, . . . [and] Glaring Retouchings” had obscured Raphael’s and his assistants’ work. This loss sorely “disappointed, and Grieved” the English artist.42

When Reynolds was in Rome in 1750–52, he took copious notes of his observations. At Palazzo Borghese he found “Domenichino’s colouring . . . very bright, but it wants the clearness and transparency of Correggio and Titian.” A saint by Caravaggio in Palazzo Mattei was “well coloured, as if the sun shone on the figures; dark shadows, but not so hard as usual.” A Saint John the Baptist by Titian, then in Sta. Maria Maggiore, was “in perfect preservation, and admirably drawn and coloured.”43 In 1781 Reynolds traveled to the Low Countries. His travel account records his belief that study of the still-life painters De Heem, Huysum, and Mignon would help artists learn “clearness and brilliancy of colouring.” He especially valued Rubens’s paintings because they “strongly remind one of a nosegay of flowers, where all the colours are bright, clear, and transparent.”44 Although cavalier in his own restorations, Reynolds could be critical of those carried out by others. When he saw Rubens’s *Descent from the Cross* in the Antwerp Cathedral, he was mortified “to see to what degree it has suffered by cleaning and mending.” He goes on to lament “that brilliant effect, which it undoubtedly once had, [is] lost in a mist of varnish, which appears to be chilled or mildewed.” The retouchings had also become visible from a distance.45

Goethe traveled in Italy from 1786 to 1788. A brief notation made in Venice at the Church of the Frari records that “Titian’s *Assumption of the Virgin* . . . has become very black.”46 In the late eighteenth century Luigi Lanzi praised the frescoes of the Carracci for their vivid coloring, especially “their [Stories of the Founding of Rome] in the Casa Magnani [Bologna]. They boast a truth, force, mixture, and harmony of colours, such as to entitle [the Carracci to be praised as] reformers of the age. They effectually banished those wretched yellows, and other weak, washy tints, introduced from parsimony, in place of azures and different colours of higher price.”47 Technical matters are frequently discussed in Lanzi’s *History of Painting in Italy* (1795–96). For Lanzi, the sixteenth-century manner of coloring was in “the good style,” but in the seventeenth century “a somber manner, which usurped its
place, . . . renders many pictures of that period of little or no value.” 48 Lanzi pointed out that the tenebrosi achieved an extreme darkness in their paintings by using “very dark and oily grounds,” a technique that was “as favorable to dispatch as injurious to the duration of [the] paintings.” 49 Lanzi was cautious about restoration, but he judged that Maratta had retouched Raphael’s frescoes in the Villa Farnesina and those in the Vatican Stanze “with incredible care.”

Stendhal appreciated the “golden light (as though it were passing through a cloud)” that illuminated Perugino’s Saint Louis in the Vatican Museum. 50 Pinturicchio’s frescoes in the sacristy of the Siena Cathedral seemed to Stendhal to have been “painted only yesterday, so well have the colors kept their freshness.” Despite the subdued light in the Stanze, and the poor condition of the frescoes, Stendhal claimed he “understood” Raphael. “We looked at his works with the degree of passion that enables one to discover and feel the details, however blackened the painting may be.” 51

Writing to Sir Thomas Lawrence, P.R.A., in 1822 from Rome, the painter William Etty waxed lyrical about Guercino’s coloring in his Martyrdom of Saint Petronilla in the Capitoline Museum. This picture was “the perfection of historic Colour; as much, or more so, than that of the Carracci, so well recommended by Sir Joshua. Its tremendous depth without sombreness, its richness without gaiety, deep-toned shades and golden, subdued lights, reminded me of one of the best of Sir Joshua’s own pictures,—in Colour,—his Dido.” 52 Etty seems to equate “historic Colour” with subdued color, and his own paintings do not show an exaggerated preference for strong lights and shades.

If so many knowledgeable viewers preferred brightly colored and “clean” paintings, who had a predilection for dark and dirty pictures, and why? Would-be connoisseurs who believed pictures should look dirty were lambasted by Burgess: “Perhaps all their knowledge consists in a few hard names, and as many hard words, which they throw out with great gravity and superciliousness; and being used to look at pictures grown dark with age, smoked in churches with lamps, or stained and altered with damps, mistake those defects for beauties; and, deceived by their prejudices, look with contempt on the clearness of colouring, and the brightness of nature that shines through a modern picture: while the man of real taste, not caring to stem the torrent of nonsense, leaves them to carry on the farce without control.” 53

Over the centuries would-be connoisseurs and gullible collectors had been fooled into thinking, usually by unscrupulous dealers and restorers, that authenticity and value were directly proportional to how dirty a picture was. A lucrative market in fakes had been built on this assertion. In his Analysis of Beauty (1753), Hogarth condemned picture dealers for conducting “a comfortable trade in such originals as have been defaced and maimed by time.” These purveyors of delusion “deal also in cook’d up copies, which they are very apt to put off for originals.” The dupes were unwitting collectors and would-be connoisseurs who required “connoisseur-spectacles” to determine if such paintings had “ever been good or bad.” 54 Hogarth’s Time Smoking a Picture (etching and engraving, 1761) shows Father Time, a jug of varnish at his feet, sitting in front of a painting and blowing smoke over its surface (Figure 1). Jean André Rouquet, a Swiss miniaturist who worked in London, published The Present State of the Arts in England in 1753. Echoing Hogarth, Rouquet disparaged dealers who propagated “the absurd notion, that a picture becomes more valuable in proportion to its antiquity.” For them time covers a painting “with its learned smoke, with that sacred mist which some day or other must conceal it from vulgar eyes, when none but the initiated shall perceive the mysterious beauties of its venerable antiquity.” 55

For the anonymous author of A Call to the Connoisseurs (1761), modern connoisseurs were the worst judges of paintings. Their ignorance of the process of ageing gave rise to erroneous theories about how paintings were meant to look. 56 In an 1850 letter William Bewick, a history painter and portraitist, denounced dealers who ruined pictures by restoration and told their clients that their paintings were “fresh . . . new-looking and clear of dirt.” He deplored “dealers spoiling, scrubbing, smoking, and swaggering, spending perhaps five or six days in skinning a picture.” 57 Dealers who traded in old masters disparaged the productions of contemporary artists for having none of the graces of their old, yellowed and smoked paintings. Writing to Hogarth from Paris in 1753, Rouquet reported that, “The humbug virtu is much more out of fashion here than in England, free thinking upon that & other topicks is more common here than amongst you if possible, old pictures & old stories fare’s a like, a dark picture it becomes a damned picture as the soul of a Dealer. & consequently modern performances are much discouraged.” 58

Thomas Uwins, in an 1850 letter, noted that the market for smoked fakes was ending and that the new collectors—“railroad speculators, iron mine men, and grinders from Sheffield, . . . Liverpool and Manchester”—preferred the works of living painters because “they do not love darkness.” Despite this encouraging change, new collectors were “now as much in the hands of the dealers as the old black collectors were formerly.” 59
Many of those taking the Grand Tour bought works of art, but these travelers were often regarded, in John Gwynn’s words, as “Fops and Fools.” Collectors were encouraged to turn to artists as advisers on their purchases. Preeminent among eighteenth-century English artists who assisted important collectors of old master paintings, Sir Joshua Reynolds arranged the purchase of numerous significant works. At times he was less than forthright about such transactions, engaging in fakery that rivaled that of dishonest dealers. In 1785 he wrote to Edmund Francis Cunningham that it would be possible to acquire two paintings by Rubens, an Adoration of the Shepherds and Saint Francis Receiving the Infant Jesus (both in the Church of the Capuchins in Antwerp). Reynolds suggested sending “a young Artist” to Antwerp and provide “an old appearance, so that few, even amongst the Connoisseurs shall distinguish the difference.” Reynolds suggested to Cunningham that if one told the family by whom the pictures were given that the originals were “allmost destroyed and will soon be totally lost,” they might well believe that the copies were “the best means of preserving the remembrance of the gift.” James Byres, the Duke of Rutland’s agent in Rome, negotiated the Boccapaduli family’s sale of Poussin’s first series of the Seven Sacraments to the duke. In order to circumvent the papal authorities who would have barred the export of this highly important group, Byres had copies made which the Roman owners would display as originals. Writing to the duke in July, Reynolds stated, “I have not the least scruple about the sending [of] copies for originals.” Not every collector was able to avail himself of Sir Joshua’s keen eye and entrepreneurial skills. And not every artist had an eye as sharp as Sir Joshua’s. Hogarth, who never visited Rome, believed that many of the artists who went there became “bad proficients in their own arts, as they became] more considerable in [the arts] of a connoisseur.” This, however, was not true of Reynolds, whose talents as artist and connoisseur remained extraordinary.

VARNISHES

Artists from the late Middle Ages through the nineteenth century had a strong preference for light varnishes that would not discolor their paintings. In the letter to Heller cited above, Dürer told his patron that once his Assumption of the Virgin was completely dry, he “would varnish it over anew with a special varnish, which no one else can make; it will last another 100 years longer than it would before. But don’t let anybody else varnish it, for all other varnishes are yellow, and the picture would be ruined for you.” Several different types of white, lustrous, and thin varnishes are described by Giovanni Battista Armenini in his On the True Precepts of the Art of Painting. Varnishes, Armenini tells us, “enliven and draw out the colors and preserve their beauty for a very long time. Varnish also has the power to bring out all the minute details in a work, making them appear very clear.” Rubens’s letters contain many references to his concern that his paintings that were stored in the dark in packing cases over long periods would turn yellow or brown. He advised his fellow artist Justus Sustermans in 1658 to expose such paintings to the sun.

Count Algarotti recommended that young artists study the Flemish school “which, chiefly by means of her varnishes, has contrived to give a most enchanting luster and transparency to her colours.” He also advised artists to turn to nature for coloring and praised Flemish painters for excellent coloring that was a close copy of nature. Lanzi reports that Sebastiano Bombelli of Udine, a pupil of Guercino’s, was said to have used a varnish of pitch and gum “which at the time produced a good effect” but later “obscured” his paintings. Lanzi recommended the use of mastic and gum water for restoration but condemned the use of oil, which turns yellow, for inpaints.

In the early 19th century a varnish debate raged in London, with the distinguished art historian Ernst Gombrich leading the contingent who favored dark ones. He based his assumption that artists preferred dark varnishes on a passage in Pliny’s Natural History (35.36.97) that describes Apelles’ supposed use of “atramentum,” or black varnish. Pliny tells us this varnish was applied thinly, drew out the brilliance of the colors, protected them from dust and dirt, and could only be seen when viewed close up. It might also cause colors to appear from a distance “as if [seen] through muscovy-glass,” that is, as if seen through a pale yellow or light brown translucent film, or coating. On the basis of this scant description, Gombrich argued that later painters used tinted varnishes. In fact, there is no evidence in historical sources that artists darkened their paintings by regular or extensive use of tinted varnishes. It became apparent during this debate that even gifted art historians may know little about historical painting materials and techniques. Given Gombrich’s eminence as an art historian, however, there are some who still think he was right.

A final varnish should not be confused with tinted glazes. As Joyce Townsend informs us, these glazes, upon aging, derive the great bulk of their colour . . . from the medium, as the deep golden tone acquired on ageing eclipses the delicate toning provided by the
pigments.” Historically, sources on painting techniques provide countless recipes for varnishes, used in painting mediums and for final surfaces. To my knowledge, no single recipe contains instructions for adding pigments to varnish to tone it down or give it a deeper color. Even if such recipes exist, and some probably do, they would be the exception to standard practice. Most artists wanted clear varnishes not dark ones. They used resins in their varnishes that yellowed or darkened over time was inevitable given the nature of such resins as mastic, copal, and sandarac. On varnishing days at the Royal Academy, Turner applied colored glazes with a varnish medium to give the final depth to his paintings. Being a masterly technician, Turner more than likely knew the varnish he used in his glazes would yellow or darken and tried to calculate the effect this would have.

Many pigments change over time. Some fade, some become darker in tone, others lighter. These changes affect the overall balance in a painting. When professional restorers remove the final varnish, a delicate operation that is the most important one during any restoration, they do not remove tinted glazes. Critics who oppose restoration believe that it is not possible to distinguish between an original glaze and a final varnish. Thus, they do not acknowledge that restoration is important work carried out by highly trained professionals. Similarly, they do not acknowledge the validity or relevance of historical texts that contradict their assumptions.

**Sistine Chapel**

The most important cleaning controversy of the second half of the twentieth century has been the highly contentious imbroglio over the Sistine Chapel restoration. To this day, positions are polarized and are likely to remain so. Many critics have been selective in their use of the historical information that sheds light on the technicalities of the ceiling’s creation, what caused its subsequent darkening, and how artists, connoisseurs, and writers on art viewed Michelangelo’s consummate masterpiece. The debate’s ferocity reflects the immense significance of the Sistine Chapel. Reynolds, who regularly visited the Vatican in 1750–52, wrote in 1769 to James Barry who was in Rome. He urged the young artist to take time to appreciate the frescoes by Raphael and Michelangelo. “If you should not relish them at first, which may probably be the case, as they have none of the qualities which are captivating at first sight, never cease looking till you feel something like inspiration come over you, till you think every other painter insipid in comparison, and to be admired only for petty excellencies.”

What were the qualities that Reynolds believed were lacking in the Stanze and Sistine frescoes? Certainly color was one of them. In his *Sixth Discourse* (1774), Reynolds found Michelangelo deficient, or neglectful, in coloring. When Giorgio Vasari published his *Lives of the Painters* in 1550, some fourteen years before Michelangelo’s death, he stated that, “[the artist] has neglected charming colouring.” Despite this shortcoming, and it is not insignificant, Vasari praised Michelangelo for showing “the true road to perfection to all who have sufficient knowledge.” In a passage on the Sistine Chapel, “a veritable beacon to our art,” Vasari commended it for containing “every perfection.” “Every perfection” certainly sounds all-inclusive, but Vasari remains ambiguous on color. In his *Dialogue on Painting* (1557) the Venetian Lodovico Dolce judged Michelangelo careless in coloring. Dolce’s judgment may well have been influenced by the rivalry between the Venetian and Florentine schools. In 1584 Giovanni Paolo Lomazzo rated Titian the best colorist and cited Raphael, Leonardo, and Correggio as good colorists. Michelangelo received praise for his anatomy. By 1600 the proposition that Michelangelo was the master of disegno, but a poor colorist, had become commonplace.

The seventeenth-century French theorists Charles Alphonse du Fresnoy and Roger de Piles fault Michelangelo as a colorist. Du Fresnoy saw the Sistine in the 1630s and found the coloring “not over true, or very pleasant.” According to him, Michelangelo did not know how to handle light and shadow. De Piles wrote that the “Carnations have too much of the Brick-colour for the Lights, and of Black for the Shad-ows.” This accurately describes how the ceiling looked before it was cleaned. Richardson found “the Colouring of [the Last Judgment] and the rest of Mich. Angelo’s Works in this Chapel . . . Black, and Harsh, so that the Tout-ensemble is very Disagreeable.” When de Brosses saw the Last Judgment in 1739, he criticized it as a disorderly composition with unharmonious coloring which he described as bluish and reddish. An especially relevant account of Michelangelo’s coloring by Richardson has been neglected by some critics of the Sistine cleaning. After seeing Michelangelo’s Doni Tondo in the Uffizi Tribuna, Richardson noted that “the Colouring is bright, and the Reflexions strong, the reverse of all the other Pictures I have seen of this Author; the Masses of Colours want Union, and seem to be placed by hazard, like the most part of An. Del Sarto’s, but more so; the Flesh is bright, but not transparent, and mellow like Andrea’s, to whom I imagine he had an eye at this time, since he
was a great Admirer of him, as appears by other things, and by what he said of him to Raffaele... This Picture is in Perfect Preservation. As many viewers have observed, the cleaned Sistine ceiling reveals that Michelangelo persisted in the manner of coloring seen in the Doni Tondo.

In 1835 Antoine-Christophe Quatremaire de Quincy remarked on what he believed to be “little attention to variety of tints” in the Sistine ceiling but noted that this approach resulted in “a greatness and simplicity of the whole.” He went on to observe that “breath is produced by a simple arrangement of colours, rather low in tone, without any violence of contrast, and the general effect is grand and harmonious, though not that refined and rich harmony which is produced by a variety of broken and transparent tints.”

In 1836 Charles Robert Leslie, Constable’s biographer, recorded a conversation with Sir David Wilkie, R.A., who expressed his appreciation of the Sistine ceiling’s “chiaroscuro and colour.” Wilkie, according to Leslie, “believed that the general effect of the pictures was not materially altered by time.” Upon first seeing the Sistine Chapel, William Collins was struck by the “grayness of [the] fresco.” When this first impression passed, he believed, as did William Etty, that the coloring was “Venetian.” Venetian color, for writers on art, was synonymous for “golden” or “tawny.” In fact, as we have subsequently learned, Collins and Etty were not admiring Michelangelo’s “Venetian” coloring but accumulated dirt and discolored glue varnishes repeatedly applied to the ceiling by restorers.

Sir Thomas Lawrence had commissioned William Bewick to make copies in the Sistine Chapel. Writing to Lawrence from Rome in 1826, Bewick described the Sistine Last Judgment, comparing a newly cleaned section of the fresco with the uncleared portion: “Some say it is spoiled, others that it might have been. The colouring of the flesh in the angels, coming as it does against a deep blue sky, takes much of the richness of Titian. The figures seem no longer attached to the background, but are suspended in the air, floating along the azure blue with masterly foreshortening, and, in this part, certainly not without grace and an attention to aerial perspective that is not perceived through the obscure opacity that wraps as a cloud the other dingy portions.” One of the most accurate assessments of Michelangelo’s coloring was made by Benjamin Robert Haydon, the history painter. While appreciative of Bewick’s Sistine copies, Haydon found Lawrence’s project nonsensical. “What absurdity... to pull things from dark recesses, sixty feet high—things that were obliged to be painted lighter, drawn fuller, and coloured harder than nature warrants, to look like life at the distance, and to bring them down to the level of the eye in a drawing-room.” This commonsense observation was made by a painter of large canvases who understood the effects needed to make a composition readable from far below. Anyone fortunate enough to have been up on the scaffolding during the Sistine restoration would have seen what Haydon described. What is truly amazing about the Sistine ceiling is that Michelangelo was able to wed great force of draftsmanship and coloring with extraordinarily subtle rendering of light and shadow. All of Michelangelo’s remarkable nuances are now visible from the floor of the chapel. It was exactly this type of forceful painting that Richardson had appreciated in Domenichino’s and Lanfranco’s frescoes in S. Andrea della Valle. “’Tis Strong, and Beautiful, and to make it appear so Below where the Beholder was to be plac’d, ’tis amazing to see what Art has been us’d in making every thing so Gross, and Hard, so Rude, and even Disagreeable, when one comes where he was when he painted it.” Like Haydon, Richardson was a painter who comprehended technical realities. The visibility of the frescoes was compounded by dim light and the accrued damages over the centuries that had nothing to do with bad restorations but were the cause of them. Richardson complained that “the Chapel has not over much Light; the Vault especially, the Windows being underneath. This helps to give this Chapel the Melancholy Air it has.” When Goethe visited the chapel in 1786, there was “brilliant sunshine outside” and consequently “the light on the frescoes was at its best.” Stendhal noted the “subdued” light in the Stanze and in the Sistine Chapel. He wondered if the frescoes would ever be seen properly. Would we have to wait until our “eyes become adjusted to the light in the chapel, or if and when the frescoes are ever cleaned?”"In 1955 Bernard Berenson found the ceiling “dark, gloomy,” adding that “these Sistine frescoes are nowadays scarcely enjoyable in the original and much more so in photographs.” Regular use of candles and incense has caused great damage to works of art. In the Cappella Bentivoglio in the church of S. Giovanni del Monte in Bologna, Richardson saw a picture by Raphael that was well-preserved except for “a Line about half a Foot in breadth quite cross the Picture, overagainst the Candles which are light up before it during Divine Service, and here the Colours are perfectly fry’d.” When Goethe returned to the Sistine Chapel in 1787 “for the ceremony of the blessing of the candles,” he noted that “these are the very candles which for three centuries have blackened the frescoes, and this is the very incense which, with sacred insolence, not only wraps the sun of art in clouds, but also makes it grow dimmer.
every year and in the end will totally eclipse it."97

Stendhal recorded a veritable bonfire below Carracci’s frescoes in Palazzo Farnese: “I admit that these frescoes are quite smoke-darkened. Six times a year they are exposed to the excessive heat of the thousand candles of his excellency the ambassador of Naples, who gives his diplomatic parties in this gallery.”98 Quatremère de Quincy found the Last Judgment “partially damaged and obscured with smoke.”99

In 1866 Hippolyte-Adolphe Taine, the historian and philosopher, recounted his visit to the Sistine Chapel. “You lie down on the old carpet covering the floor and look up [in vain]. The frescoes are located] a hundred feet high, smoked, scaling off and crowded to suffocation.”100 John Addington Symonds, author of many volumes on the Renaissance and its art, deplored the condition of the Last Judgment. His anger is palpable: “time, negligence, and outrage, the dust of centuries, the burned papers of successive conclaves, the smoke of altar-candles [have had their effect]. What Michelangelo intended by his scheme of colour is entirely lost... The whole surface has sunk into a bluish fog, deepening to something like lamp-black around the altar.”101 Many critics of the Sistine cleaning are unwilling to acknowledge the extent of the damage caused by smoke and incense, holding that Michelangelo himself applied layers of brown pollution to create harmony. This conviction is based on an ignorance of the buon fresco technique used by Michelangelo. Never mind that Vasari tells us that Michelangelo wanted to prove himself superior to those artists who had painted frescoes before him.102

When Sebastiano del Piombo suggested that Michelangelo execute the Last Judgment in oil, he replied that “he would only do it in fresco, and that oil-painting was a woman’s art and only fit for lazy well-to-do people like Frà Sebastiano.”103 Buon fresco painting is done directly on wet lime and “the work must not be left until all that is intended to be done that day is finished.” Buon fresco painters must have “a firm and quick hand.” Anyone who has seen Michelangelo’s ceiling up close can only marvel at the amount of work he finished in a day. He got ever better as he worked faster to satisfy the impatient Julius II. And, as Vasari sums up, buon fresco is “the most durable of all methods, and by age it continually acquires beauty and harmony in an infinitely greater degree than any of the others.”104 In his True Principles of the Art of Painting (1586) Giovanni Battista Armenini gives a cogent summation of the buon fresco technique and commends “Michelangelo, Daniello [Daniele da Volterra], and Francesco Salviati” for the “most vivid examples of such work.”105

Retouching over buon fresco is done al secco by mixing pigments with a glue, gum, egg, or casein medium and applying them over the dried buon fresco. Vasari repeatedly condemns al secco painting because it is not durable and causes frescoes to age more quickly: “It is necessary to take care not to retouch the painting with parchment glue, yolk of egg, gum, gum tragacanth, as many painters do; because, while the painting fails to acquire its usual brightness, the colours become tarnished by this, and, in a short space of time, turn black. And therefore let all those who wish to paint upon walls, paint in fresco, like men, without retouching in secco; which, besides being a most vile practice, shortens the duration of the pictures.”106 The effects of covering buon fresco with glue were glaringly visible when the blackened layers of glue used by earlier restorers were removed during the Sistine restoration. Domenico Ghirlandaio, Stefano Veronese, Antonio Veneziano, and Niccolò dall’Abate are praised by Vasari for not working al secco. Alessio Baldovinetti used egg yolk and varnish to temper the colors he painted al secco over a buon fresco sketch in Santa Maria Novella in Florence. This extensive al secco overpainting, as Vasari notes, did not protect his fresco from dampness, as he hoped it would.107 Baldovinetti’s considerable al secco retouchings have also disappeared in his Nativity in the atrium of Santissima Annunziata in Florence.108 In his Notizie de’ professori del disegno da Cimabue in qua (1681) Filippo Baldinucci extolled Matteo Rosselli as a master of buon fresco, saying that since he never used secco retouchings, “his pictures look more like oil than fresco paintings.”109

Some critics of the Sistine restoration have accused the Vatican restorers of removing Michelangelo’s secco retouchings. While contemporaneous sources indicate that masters of buon fresco did not often resort to secco, these critics persist in their belief that Michelangelo made extensive use of secco. The key word is “extensive.” It is true that in the Sistine ceiling Michelangelo made some limited use of secco and mezzo fresco retouchings.110 All of his changes and/or additions were, however, plainly visible to the restorers; any alterations by Michelangelo were documented and left in place. Vasari also reported that Michelangelo did retouch some things a secco, such as the backgrounds, draperies, the gold ornaments and things, to impart greater richness and a better appearance.”111 However, when Julius II considered how long it would take to reconstruct the scaffolding so Michelangelo could carry out this work, the pope refused the artist’s request even though he, too, would have liked it to have been done.112

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The major concerns of most critics of restoration are aesthetic. We must be wary of those whom Etty characterized as “mere [repeaters] of orthodox misconception, or traditional fatuity,” those who “do not see with their own eyes, or [do not] have eyes to see.” Few art history programs now have mandatory courses in historical painting materials and techniques that would acquaint students with how paintings were actually executed and how they were intended to look. Few if any include courses on restoration. In fact, the best people to teach art history students how to look at old master paintings are often restorers.

Richardson summed up the problem: “The Truth is, few People see the Beauties of Things; the Objects are Seen, as the Sounds of Musick are Heard; but ‘tis necessary to have an Eye for One, as well as an Ear for the Other, and both Improvd by Study, and Application. Herein lies the Difficulty of Judging of a Picture, as ‘tis the true Reason why there are so few good Painters, or good Judges. ‘Tis not easy to Paint well, but easier than to See well; that is an Art that is learnt by conversing with the Best Masters, and the Best Authors; but even all this is not sufficient without Genius, and Application, at least to carry a Man any considerable length.”

When art historians more fully understand historical materials and techniques, and the damages and changes caused by time, materials, faulty techniques, or poor restorations, they will be able to make meaningful contributions to the serious and complicated issues involved in restoration. Philip Hendy, who was Director of the National Gallery, London, during the third cleaning controversy of 1946–47, believed that “on these subjects there has been too long a silence.” There still is. Misunderstandings have led to polarized and vitriolic controversies. Should this situation improve, as all serious people in the conservation profession hope it will, there will undoubtedly remain those for whom restoration will forever remain an evil. As Giovanni Pietro Bellori observed in 1695, there are “superstitious” people “who would rather consent to the entire destruction of an excellent painting, than allow it to be touched by the hand of another person, however skillful and excellent he may be; it is a popular error, to believe that nothing can be done, but to try to preserve, as well as possible, the relics of antiquity, and the venerable remains of such wonderful labours.” In the meantime, the conservators might be well advised to pay more attention to communication skills. Knowing you are right is one thing; proving it in a convincing manner is another. Reluctance to speak compounds misunderstandings. This said, we must acknowledge that some people will never be convinced, no matter how compelling the evidence.

NOTES


11. Ibid., p. 23.


19. Jonathan Richardson Sr. and Jonathan Richardson Jr., An Account of the Statues, Bas-Reliefs, Drawings and Pictures in Italy, France, &c., 2nd ed. (London, 1754), p. 197, Jonathan Richardson Jr. went to Italy and made notes for his father that were used for the book.


23. See Hendy, foreword to Exhibition of Cleared Pictures, p. ix.

25. Stendhal, *A Roman Journal*, ed. and trans. Haakon Chevalier (New York, 1957), p. 38, and see also p. 29. Stendhal was first in Italy in 1811. The Roman journal was written in Paris in collaboration with his cousin Romain Colomb, who had been to Italy and brought back copious notes. On the other sources used by Stendhal, see Chevalier’s foreword, pp. xx–xxiii.


28. Ibid.


33. Ibid., p. 84.


35. Richardson and Richardson, *Account*, pp. 29, 68–69, 72, 319.


39. Ibid., p. 32.

40. Ibid.


45. Ibid., p. 279.


51. Ibid., pp. 33, 35.


62. Ibid., p. 126.


70. Pliny, *Natural History*, trans. H. Rackham, Loeb Classical Library (London, 1968), vol. 9, p. 333. See also Ruhemann, *Cleaning of Paintings*, pp. 425–26, for a bibliography of the articles pro and con the assumption that Apelles’ varnish was used by later artists.


72. See note 63 above.


76. Ibid., vol. 4, p. 127.


90. Ibid., vol. 2, p. 114.
91. Richardson and Richardson, *Account*, p. 320.
92. Ibid., p. 267.
94. Stendhal, *Roman Journal*, p. 64, and see also p. 141.
103. Ibid., vol. 3, p. 119.
108. For a reproduction of Baldovinetti’s Nativity that clearly shows a secco losses, see *Looking at Pictures with Bernard Berenson* (New York, 1974), p. 161.
112. Ibid.
114. Richardson and Richardson, *Account*, p. 95.
115. Hendy, foreword to *Exhibition of Cleared Pictures*, p. xxiii.
Intentional Alterations of Early Netherlandish Paintings

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In my first position at The Metropolitan Museum of Art, I was privileged to be invited to collaborate with an exceptional interdisciplinary team—the Museum’s research scientist, Pieter Meyers; the curator of seventeenth-century paintings, Egbert Haverkamp-Begemann; and the chairman of the Department of Paintings Conservation, John Brealey—in a scientific investigation of paintings by Rembrandt in the Museum’s collection. When the project came to an end, John Brealey asked me to join Paintings Conservation as the department’s art historian to investigate the early Netherlandish paintings with infrared reflectography. This unconventional route to my current position as a curator in the Department of European Paintings has had an enormous impact on my approach to the study of paintings.

The indispensable lessons that I learned from John Brealey about how to judge the state and condition of paintings, the details of their technique and manufacture, and the elements of their style today serve as the foundation of every aesthetic judgment that I make as a curator of paintings. John’s enduring contribution was his commitment to an interdisciplinary approach, one uniting conservation, scientific examination, and art history. Today this approach, now often referred to as technical art history, is gaining increasing acceptance.¹

It was John’s belief that an assessment of the state and condition of a painting was always the essential first step toward understanding it. This approach to a work of art, practical and seemingly straightforward, is, however, deceptively simple and in fact takes years of close looking. Indeed, training the eye is a never-ending process. There are distinctions to be made between the various types of changes that have occurred over time—between those that have happened naturally and those that have resulted from human intervention. It is the latter group that I wish to discuss in this article, in an attempt to determine, within the context of Brealey’s interdisciplinary approach, how, why, and when such changes were made. The assessment of a given alteration—be it an addition or a subtraction—often necessitates a reconsideration of the painting’s history, which sometimes, in turn, reveals facts about the function and importance of the work in its own time.

Although elements have been added to and subtracted from paintings from all periods and cultures, those I wish to discuss here can be observed in works dating from the fifteenth and sixteenth centuries in the Low Countries, including several in the Metropolitan Museum. This is a cautionary tale, as one quickly learns that in the evaluation of such examples, preconceived notions can easily lead to faulty conclusions. Let me illustrate what I mean with some cases in point.

The presence of haloes as identifying appurtenances of holy figures in early Netherlandish paintings is a relatively rare occurrence; their appearance in Italian paintings of the same period is commonplace. To assess whether haloes are original to a painting or later additions, close visual scrutiny of images with haloes is the best way to begin. Noted paintings in the Metropolitan’s collection in which the authenticity of haloes has been brought into question include the Portrait of a Carthusian (Figures 1, 2) and A Goldsmith in His Shop (Saint Eligius?) (Figures 3, 4), both by Petrus Christus (active by 1444, died 1475/76), and the Portrait of a Young Man by Hans Memling (active ca. 1465, died 1494), in the Robert Lehman Collection (Figures 5, 6). The haloes in the paintings by Christus were questioned by Max J. Friedländer as early as 1916 and by William Martin Conway in 1921.² In preparation for the 1994 exhibition “Petrus Christus: Renaissance Master of Bruges,” the issue of the haloes was again raised. They were determined through technical examination to be later additions, and they were removed.³ With the removal of the haloes, the aesthetic intentions of the artist were restored. Christus was among the first early Netherlandish painters to break through the barrier of the plain, dark background that was conventionally employed in portraiture by providing an illusionistic...
space to surround the figures. The addition of the haloes by contrast introduced an element that forced the viewer to focus on the foreground, discouraging further investigation of the space beyond the picture plane. The restoration also allowed for a renewed discussion of the function and meaning of the paintings. Neither panel was originally conceived as a religious image; the false haloes had altered their intended function as secular portraits.

The identification of the Carthusian in Christus’s portrait as a saint had long been doubted, as there was no known Carthusian lay brother who rose to sainthood in the south Netherlands around 1446, when the painting was made.4 (The sitter is not a monk, as he has no tonsure and is not, by the rule of the order, clean-shaven.) Perhaps it was Bruno (ca. 1030–1101), the founder of the Carthusian Order, formally canonized in 1623, whom a later owner of the painting wished to identify by the addition of the halo. The alteration may have been made in Spain; the panel was in the collection of Don Ramon de Oms, viceroy of Majorca by 1911, and two nineteenth-century copies of the painting were known in Valencian collections.5

In the Portrait of a Goldsmith (Figures 3, 4), the removal of the halo similarly prompted discussion about the identity of the central figure. The sitter had been thought to represent Saint Eligius, the patron saint of goldsmiths, and until 1908 the picture was known by that eponymous title. That year, Martha Wolff and Hugo van der Velden each noted, independently, that the painting did not conform to any of the standard representations of the saint, which show him performing miracles, and they argued convincingly that the identification of the sitter with Saint Eligius occurred in modern times.6 Early mentions of the painting refer to it only as a representation of a goldsmith in his shop. It was not until 1817 that the subject of the picture was described as “a goldsmith or rather the patron of goldsmiths—Saint Eligius.”7 It may have been at this time, when the painting also received a new gold frame, that the halo was added.8 Van der Velden even proposed an alternative identification for the sitter, namely, Willem van Vlueten,
Figure 3. Petrus Christus. A Goldsmith in His Shop (with halo), 1449. Oil on panel, 100.1 x 85.8 cm. The Metropolitan Museum of Art, Robert Lehman Collection (1975.1110).

Figure 4. Figure 3, with halo removed
who is documented as having paid for his citizenship in Bruges in 1433 and later rose to prominence as a celebrated goldsmith at the court of Duke Philip the Good. If Van der Velden is correct, the portrait would be among the earliest and largest professional portraits known in early Netherlandish painting. This would, in turn, certainly call for a reassessment of the development of early portraiture.

Memling’s Portrait of a Young Man (Figure 5) was considered, when first mentioned in 1857 by Gustav Waagen, as a Saint Sebastian, since the figure then appeared with two added features—a halo and an arrow held between the thumb and forefinger of his left hand. The landscape view through the window remarkably reappears in two Italian paintings of about 1480, a Self-Portrait by Pietro Perugino (active by 1469, died 1523; Galleria degli Uffizi, Florence) and a Virgin and Child from the circle of Andrea del Verrocchio (possibly Domenico Ghirlandaio [1449–1494]; Musée du Louvre, Paris). The quotation indicates that the panel must have traveled to Italy soon after it was painted. This would explain the Italianate foreshortened oval form of the halo, traces of which may still be seen when viewing the picture in raking light. By the time Philip Lehman (Robert Lehman’s father) acquired the painting in 1915, both the halo and the arrow had been removed in a cleaning and restoration of 1912 in London. Evidence of this is visible in a stripped-state photo (Figure 6).

Careful technical study of an arrow inserted in another Memling portrait, namely the Man with an Arrow in the National Gallery, Washington, D.C. (Figure 7), however, raises the question of whether this same feature of the Lehman painting was indeed a much later addition. The arrow of the Washington portrait also was thought not to be part of the original conception. However, the pigments used to paint the arrow were determined, through technical analysis, to be contemporary with those of the rest of the portrait. This result calls into question just how early it was inserted and the significance this alteration has for the meaning of the portrait. One plausible explanation is that the arrows in both the Washington and the Lehman portraits were added soon after the completion of each painting, perhaps after the sitters had won prizes in archery contests. The archery guilds and
their annual shooting competitions were an important part of fifteenth-century Netherlandish city life.

Other examples of alterations appear to be roughly contemporary with the date of a painting, perhaps requested by the first or a subsequent owner to bring the painting up-to-date or to render it more meaningful. How else may we explain the addition of the arched latticework and grape arbor to Hans Memling’s *Virgin and Child with Saints Catherine of Alexandria and Barbara* (Figure 8)? There is no underdrawing for this feature, as there is for the rest of the work.¹⁴ Close examination of the surface reveals that the greens used for the arbor and employed for the trees in the background are of different values and intensities (Figures 9, 10, Colorplates 4, 5). Furthermore, the brushwork used to describe the leaves in the arbor is broader and more descriptive of nature than are the schematic strokes that characterize the stylized trees and bushes of the background landscape.¹⁵ Because the paint film for the arbor appears, under high magnification, to be very old and integral with the original paint layers, indicating that it was added very early on to the painting, another explanation must be sought.

Although the identity of the hand responsible for the arbor is difficult to determine, the probable impe-

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Figure 7. Hans Memling. *Portrait of a Man with an Arrow*, ca. 1470/75. Oil on panel, 31.9 x 25.8 cm. National Gallery of Art, Washington, D.C. (photo: National Gallery of Art)

Figure 8. Hans Memling. *Virgin and Child with Saints Catherine of Alexandria and Barbara*, early 1480s. Oil on panel, 68.3 x 73.3 cm. The Metropolitan Museum of Art, Bequest of Benjamin Altman, 1913 (14.40.634)
tus for the alteration may perhaps be more readily explained. Grapes are a well-known symbol for the Eucharist and for the divine salvation that was bestowed through Christ’s sacrifice on the Cross.16 The iconography of the grapes is especially significant in its connection to Memling’s hometown of Bruges, where, still today, a relic of Christ’s blood is housed in the Basilica of the Holy Blood. The Holy Blood had been granted papal justification by Pope Sixtus IV (r. 1471–84) in 1467 and 1472, which gave rise to a popular devotion in both Bruges and Mantua.17 The addition of the arbor to Memling’s Virgin and Child with Saints Catherine of Alexandria and Barbara is evidence of this devotion. Whether the male donor, shown kneeling at the left of the assembly of holy figures, requested the alteration himself or whether it was made by a later owner is not known. But the fact that it appears in an early (probably sixteenth century) copy of the painting (Galleria dell’Accademia, Venice) suggests that it was added not long after the completion of the painting.18

Several early Netherlandish paintings record through their alterations the most significant events of life—marriage, birth, and death. The Merode Trip-
Figure 12. Hans Memling, *The Moreel Triptych*, 1484. Oil on panel; inside frame measurements, central panel: 121.1 x 153.4 cm, left wing: 120.7 x 69 cm., right wing: 121 x 68.6 cm. Groeningemuseum, Bruges (Photo: ACL)

Figure 13. Master of the Saint Barbara Legend (Netherlandish, active late 15th century). *Abner’s Messenger Before David (?)*, ca. 1480. Oil on panel, 93.3 x 44.8 cm. The Metropolitan Museum of Art, Bequest of Michael Friedsam, 1931 (31.100.5fa)

Figure 14. Detail of Figure 13, showing figures with added crosses
tych (Figure 11), dating to the 1430s, in The Cloisters Collection, is one case in point. Sometime after the completion of the left wing, two figures were added, presumably when the donor, Peter Engebrechts (shown kneeling), was married. The two figures are the town messenger at the back gate and Engebrechts’s new wife. It was common practice for noble families thus to document weddings and births, adding to already existing paintings portraits of new family members. In Memling’s Moreel Triptych of 1484 in the Groeningemuseum, Bruges (Figure 12), for example, six heads of the daughters were later painted over the completed landscape on the right wing. The heads of the sons on the left wing were moved to accommodate a late arrival to the family of Willem Moreel and his wife, Barbara van Vlaenderbergh. The wings of an altarpiece by the Master of the Saint Barbara Legend in The Metropolitan Museum of Art (Figure 13) acknowledge the deaths of four members of the guild, lay confraternity, or civic group that commissioned the triptych. Small crosses were later painted in above the praying hands of these kneeling donors (Figure 14), who may have died in an outbreak of the plague of 1489–90. Examples such as these are readily explained; others are more problematic, and a word of caution is advised. It had been maintained that on the wings of Gerard David’s Nativity Triptych in the Metropolitan Museum (Figures 15, 16), the attributes of the pig and of the wheel and sword were later additions to the
original work, made in order to transform the kneeling donor figures into saints. This could have occurred when the triptych was acquired by a collector for whom the identities of the donors were unknown and for whom their conversion into saints—specifically, Saints Anthony Abbot and Catherine—had particular personal relevance. The explanation is logical, but the conclusion was contradicted by the results of technical analysis. Indeed, these findings call for a reconsideration of the period and context in which the triptych was made. It is very clear, under the high magnification of a microscope, that the image of the pig, while painted over the black coat of the male donor, is integral with the original paint layers and was thus part of the initial composition. The instance of the female donor even more clearly demonstrates the evolution of the picture. The X-radiograph (Figure 17) shows that an area was left in reserve for both the wheel and the sword, indicating that these traditional attributes of Saint Catherine were from the outset intended to be associated with the figure. Catherine’s crown was also part of the original plan, although it has been restored. Unfortunately we do not know the identities of the donor figures, but it is likely that they are an Anthony and a Catherine who wished to model their daily lives after those of their name saints.

The representation of mortals as saints, reflecting a desire to emulate the lives of the saints and to follow their sacrifices and devotion to Christ becomes increasingly apparent in the early sixteenth century. The practice reflects an extension of the beliefs of and widespread adherence to the Modern Devotion, a popular reform movement begun by Geert Grote in the late fourteenth century and initially practiced by the Brothers of the Common Life. This religious movement encouraged an individual to imitate Christ by identifying with his life and sufferings, renouncing the world, and embracing virtue. The more readily identified examples of this phenomenon in painting are those depicting royalty or nobility. Margaret of Austria (1480–1530) and Prince Juan (1478–1497) were portrayed as Saints Margaret and John in one panel of a lost diptych documented in Margaret’s inventory of 1516. Juan de Flandes (active by 1496, died 1519) most likely intended the same royal pair to be identified as the couple celebrating their marriage in his intimate Marriage Feast at Cana (Metropolitan Museum of Art). Margaret of Austria also had her portrait painted as Mary Magdalene (e.g., Mary Magdalene, ca. 1510–20, by the Master of the Magdalene Legend, Staatliche Galerie, Schleisheim, on loan from the Alte Pinakothek, Munich). The Virgin in Michel Sittow’s (1469–1525) Virgin and Child, ca. 1515–18, in Berlin (Gemäldegalerie), and the Magdalene in his Mary Magdalene, ca. 1518, in the Detroit Institute of Arts, may be portraits of Catherine of Aragon. Jan Gossaert (active by 1503, died 1532) used disguised portraiture on the wings of the Deposition Triptych of 1521 (wings, Toledo Museum of Art; centerpiece, State Hermitage Museum, St. Petersburg), where he gave John the Baptist his own features and Saint Peter those of the donor, Pedro de Salamanca.

For Anna van Bergen (1492–1541), wife of Aldof of Burgundy (ca. 1489–1540), marquis of Veere, identification with the Virgin Mary as the exemplar of ideal motherhood had a very personal significance. According to Karel van Mander, in his Schilder-boeck of 1604, Anna and her son were the models for Gossaert and his workshop in their production of the Virgin and Child, ca. 1525, of which multiple versions were
Virgin and Child attributed to the Master of the Embroidered Foliage (active early sixteenth century). All five paintings show the same motif of the Virgin and Child, but with varied backgrounds. Although each panel is by a different painter, they appear to come from the same workshop, in which the pattern for the Virgin and Child was used by several artists to produce variants of one image for sale on the open market.

One of the versions, today in the Clark Art Institute, Williamstown, Massachusetts (Figure 20), is distinguished from the other four by the fact that the execution of the head and right hand of the Virgin is clearly superior to that in the rest of the painting. These two features have been reworked, showing an approach markedly different from that in the other pictures where the handling is uniform throughout. It is notable that the underdrawing of the Williamstown painting is followed quite closely, with the exception of that for the head and the hand. The reworked head is raised to a slightly more vertical position, and her broad headband is painted as a thin fillet embellished with pearls and a gemstone (Figures 21, 22). Even more telling is the Virgin’s right hand. The

made. Comparison of the features of the Virgin with known depictions of Anna in the Arras Codex (Bibliothèque Municipale, Arras) in the Clark Art Institute, Williamstown (Figure 18), and in the Isabella Stewart Gardner Museum, Boston, tend to support Van Mander’s claim. Of the numerous extant versions, the one in the Metropolitan Museum is the finest (Figure 19).

Occasionally, the close scrutiny of early Netherlandish paintings yields quite another finding—that portions of figures, and sometimes even figures in their entirety, were reworked or initially painted by a different hand. Here the physical evidence hints at developments in workshop structure and procedure, and perhaps also at contractual stipulations. The observation that the Virgin’s head is clearly the work of a different and superior hand in several panel paintings and manuscript illuminations of the same period (that is, the late fifteenth and early sixteenth centuries) has often led to the conclusion that they were overpainted at a later date. However, technical examination has in some cases proven otherwise. Let us take, for example, the five panels of about 1510 of the

Figure 18. Jan Gossaert (Netherlandish, active by 1503, died 1532). Portrait of Anna van Bergen, ca. 1525. Oil on panel, 54 x 41 cm. The Sterling and Francine Clark Art Institute, Williamstown, Mass., Gift of the Executors of Governor Lehman’s estate and the Edith and Herbert Lehman Foundation

Figure 19. Jan Gossaert. Virgin and Child, ca. 1525. Oil on panel, 45.4 x 34.6 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917 (17.190.17)
Figure 20. Master of the Embroidered Foliage (Netherlandish, active early 16th century). *Virgin and Child*, ca. 1510. Oil on panel, 99 x 66 cm. The Sterling and Francine Clark Art Institute, Williamstown, Mass. (photo: Ron Spronk)

Figure 21. Detail of Figure 20, showing the Virgin’s head (photo: Ron Spronk)

Figure 22. Infrared reflectogram of Figure 21 (photo: Ron Spronk)
underdrawing shows the slender, tubular fingers pointed vertically, similar to those of the Virgin’s painted left hand (Figures 23, 24). However, the right hand is repainted in a more carefully articulated manner, as if studied from life by an artist who clearly understood the naturalistic rendering of flesh over bony structure (Figure 25). There was nothing found during the technical investigation of the painting to contradict the supposition that these were roughly contemporary alterations. Perhaps the head and right hand were added by the master of the workshop. This could well have been done at the request of a client wishing to purchase the work, one who was willing to pay a higher price for such intervention.

Let us look briefly at another example. The Évora Altarpiece, associated with the workshop of Gerard David, is with its thirteen panels one of the largest early Netherlandish altarpieces known. It was produced in the first decades of the sixteenth century for the cathedral in Évora, Portugal, and is currently under study and restoration at the Instituto Português de Conservação e Restauro, Lisbon. In the center panel, which represents the Virgin and Child in Glory with Angels (Figure 26), the head of the Virgin may easily be identified as the product of a different and
Figure 26. Workshop of Gerard David. *Virgin in Glory* (detail) from the Évora Altarpiece (detail), ca. 1510. Museu de Évora, Portugal (photo: Courtesy of the Museu de Évora, José Pessoa, photographer)

Figure 27. X-radiograph of Figure 26 (photo: Courtesy of the Museu de Évora, José Pessoa, photographer)
superior hand. The X-radiograph here reveals a thicker application of lead white than in other heads in the painting, in an apparent reworking of the area (Figure 27).\textsuperscript{30}

Although archival documentation concerning the manufacture of the altarpiece is lacking, such a large and important work most certainly had a detailed contract. Its production undoubtedly required the participation of several assistants, and the panels show the involvement of a number of hands. Was the superior execution of the head of the Virgin that of the master of the workshop? Further study may yet yield the answer.

The practice of having important sections of a work painted or reworked occurs also in the sister art of manuscript illumination.\textsuperscript{31} An early example, dating to the 1450s, is the Llangattock Hours, in the J. Paul Getty Museum, Los Angeles. The book is the collaborative effort of as many as eight illuminators. In The Annunciation (fol. 53v), the face and hands of the Virgin are by Willem Vrelant (1430–1481/82), while the rest of the miniature is the work of the Master of the Llangattock Hours.\textsuperscript{32} Gerard David was the superior hand in a 1486 Book of Hours in the Biblioteca del Monasterio de San Lorenzo de El Escorial (Vitramas 12). His work is evident in several folios throughout the manuscript.\textsuperscript{33} David was responsible for the most important illuminations, the Virgin and Child (fol. 30v) and the Salvator Mundi (now in the Robert Lehman Collection of the Metropolitan Museum), and he also collaborated on other miniatures, painting the heads of the main figures in the Crucifixion (fol. 17v) and the Adoration of the Magi (fol. 83v). He may also have painted the heads of the Virgin and Child on folio 197 of the Rothschild Prayerbook of about 1510 (present location unknown).\textsuperscript{34}

We have little written documentation about the actual production of the abovementioned works. In the case of the panel paintings, however, we do know that they were either part of a series of like images offered on the open market (as in the Clark Art Institute Virgin and Child) or the collaborative effort of a team of artists on a large-scale work commissioned for export (the Évora Altarpiece). In each case, the wishes of the client and the specific requirements of the contract undoubtedly came into play.

Unfortunately, relatively few contracts survive. However, of those that do, occasionally certain ones stipulate that the heads and other parts of a painting must be painted by a hand superior to the rest of the work. On August 31, 1487, the church masters of Saint Bavo in Haarlem commissioned Mournin and Claas van Waterlant to paint additional portions of an altarpiece on which they had already worked, and to be assisted in their work by “as good a master as can be found in Holland” for some faces and other parts.\textsuperscript{35} An additional document concerning a lawsuit against Albert (or Aelbrecht) Cornelis (active in Bruges before 1513, died 1531) may be helpful to consider. It pertains to Cornelis’s only documented painting, the Coronation of the Virgin (Groeningemuseum, Bruges), which was commissioned by the Guild of Saint Francis in 1517 for their chapel in the Church of Saint James in Bruges. The contract stipulates that Cornelis himself must paint the main parts of the image, including the faces and hands of the figures. In the suit brought against him, Cornelis was accused of subcontracting portions of the painting. In his defense he argued that his sole obligation was to paint only the faces within a designated period of time. The suit was resolved, but not without Cornelis having to rework some sections of the painting that he had originally subcontracted.\textsuperscript{36}

From this brief inquiry into the practice of intentional alterations in early Netherlandish painting, it is clear that identifying such changes is only the first step toward understanding the meaning and function of a work of art in its own time. Technical examination, comparative looking, and a close reading of period contracts, guild regulations, and workshop practices are also necessary to place the work in its proper context. Toward this end, it becomes increasingly apparent that, ultimately, it is only through an interdisciplinary approach that new discoveries can be made.

\textbf{NOTES}

4. See H. J. J. Scholten, “Petrus Christus en zijn portret van een Kartuizer,” Oud Holland 75 (1956), pp. 59–72, regarding this question and the possible lay brothers at Genadendal at this time who may be represented here.
8. Ibid., p. 69.
15. Dirk De Vos has suggested that the grape arbor, which is not present in any other painting by Hans Memling but does occur in the Detroit Institute of Arts *Virgo inter Virgines*, by the Master of the Legend of Saint Lucy (active ca. 1475–1505), may have been added to Memling’s painting by that master (De Vos, *Hans Memling*, p. 166, no. 35).
24. Ibid., p. 92.
26. The underdrawing was studied by Henry Lie and Ron Sprock of the Straus Center for Conservation and Technical Studies, Cambridge, Massachusetts, in July 1997. I am grateful to Ron for sharing with me these results and for allowing me to publish them here.
27. I am grateful to Sandy Webber and Kate Duffy of the Williamstown Art Conservation Center, Williamstown, Massachusetts, for discussing this matter with me. See the examination report of Sandy Webber, July 15–16, 2004, on file at the Center.
29. I am grateful to Isabel Cordeiro, Vice Director, Portuguese Institute of Museums, Lisbon, and to Joachim Caetano, Director, Museu de Évora, for inviting me to serve as consultant on this project.
30. We are currently awaiting results from infrared reflectography, which should further clarify the alteration made to this area. I am grateful to José Pessoa, at the Instituto Português de Conservação e Restauro, for the photographic documentation of the painting, and to Joachim Caetaro, for permission to publish these results.
33. Ibid., pp. 345–47, no. 99.
Dating Velázquez's *The Supper at Emmaus*

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John Brealey’s life and work were bound up inextricably with Spanish art, and, in particular, with the paintings of Velázquez. As the foreigner selected to restore the totemic *Las Meninas* (Museo Nacional del Prado, Madrid), he was initially attacked by the Spanish press, although his work on the picture was later so celebrated that he was awarded the Gold Medal for Artistic Achievement by King Juan Carlos I. The restoration of *Las Meninas* (Museo Nacional del Prado, Madrid) was the beginning of a deep involvement with the Prado and the work of its conservation department. The catalogue for the Velázquez exhibition arranged jointly by the Prado and the Metropolitan Museum and held at the Metropolitan in 1989 is dedicated to John. At the end of a standard six-year apprenticeship Velázquez married the master’s daughter and set up his own studio. The prevailing artistic style in Seville—a derivative blend of Flemish and Italian influences—reflected the orthodoxy demanded by the Catholic Church, the principal patron of artists in Spain’s ecclesiastical center. Within this conservative climate, the extraordinary skill and originality of the young Velázquez are seen in his earliest extant works: religious subjects, portraits, and scenes from everyday life, painted from careful observation of his models, both animate and inanimate, including *The Adoration of the Magi* (Museo Nacional del Prado, Madrid) (Figure 2) and *The Waterseller of Seville* (Wellington Museum, Apsley House, London).

In April 1622, he made a trip to Madrid to seek royal patronage from the new king, Philip IV (r. 1621–65). Though this initial attempt was unsuccessful, friends of Pacheco’s at court managed to bring the young artist to the attention of Gaspar de Guzmán de Olivares, the king’s powerful first minister. After a period of nine months back in Seville, on October 6, 1623, Velázquez moved to Madrid to assume a position as a court painter. Over the next six years his principal role was to paint portraits of Philip IV and the royal family. Exposure to the art of the royal collections and the ambassadorial visit of Peter Paul Rubens to the court from September 1628 to April 1629 had a significant impact on Velázquez’s work, both stylistically and technically. Near the end of or shortly after Rubens’s visit, he painted the *Feast of Bacchus* (Museo Nacional del Prado, Madrid), a mythological piece presented in a contemporary setting that continues to surprise viewers with the direct treatment of this unexpected combination. Velázquez traveled to Italy in the summer of 1629 to immerse himself in the artistic culture of such centers as Venice, Ferrara, Rome, and Naples, returning to Madrid early in 1631. In Rome he painted two imposing pictures that demonstrate the impact of his encounters thus far: *Joseph’s Coat Presented to Jacob* (Monastery of San Lorenzo el Real de El Escorial, Madrid) and *The Forge of Vulcan* (Museo Nacional del Prado, Madrid).
This brief outline of the time frame within which The Supper at Emmaus has been situated covers a broad swath of Velázquez’s stylistic and technical development. The difficulty in dating The Supper at Emmaus was demonstrated by Beruete, who published the painting in 1898 as “undoubtedly authentic, and dating from the early days of Velázquez,” even though he had expressed the opinion in a letter, seven years earlier, that it was painted in 1626–29. The entry in the catalogue of the 1989 exhibition in New York lists the following opinions: “Lafuente Ferrari proposes 1619; Bardi and Pantorba, 1620; Soria, 1622; Gudiol, 1622 or 1623; Brown, after 1623; Wehle and Trapier, 1625–27; Lopez-Rey, 1628 or 1629, on the eve of Velázquez’s first trip to Italy.” To this partial list may be added Fernando Marias who dates the work as late as 1628–32. How is such a range of opinion to be explained? While the painting shares features of paintings dating from the Seville period—the dark overall tonality, strong tenebrism, and, though ostensibly a religious scene, its treatment as a bodegón—it is something of a hybrid. Its more colorful appearance, carefully orchestrated composition, and dramatic treatment of the subject, when compared to the strange stasis pervading the Sevillian works, have suggested to some scholars that Velázquez must have encountered Italian paintings in the royal collection,
Figure 2. Velázquez. *The Adoration of the Magi*, 1619. Oil on canvas, 204 x 126.5 cm. Museo Nacional del Prado, Madrid (1165)
thus dating the painting to the first Madrid period (1623–29) or to the nine months in Seville that followed his visit to the city in 1622.8

While most Velázquez scholars have accepted The Supper at Emmaus as autograph, a few have questioned its attribution. Elizabeth du Gué Trapier, apparently accepting Henry Wehle’s dating of 1625–27, expressed doubts based, in part, on a comparison with The Feast of Bacchus; the handling of these two works indeed differs considerably.9 Leo Steinberg elaborated on Trapier’s comments in a more barbed attack on the attribution, citing the picture’s “trick effects,” “inorganic” modeling, and “empty rhetoric.”10 José Camón Aznar put forward, and then stepped back from, an attribution to the Sicilian painter Alonso Rodríguez (1578–1648).11 The painting was not featured in either of two recent catalogues of exhibitions about Velázquez’s Sevillian period.12

Velázquez’s painting technique changed to an extraordinary degree during the course of his working life, from the opaque, subdued, closed-contour forms of the bodegones of the Seville period to the luminous and impressionistic handling seen in such late works as the Metropolitan Museum’s Juan de Pareja (MMA 1971.86). The technical examination of the artist’s paintings undertaken in the last twenty years at the Prado and elsewhere has elucidated the chronology of materials and techniques that is closely linked to the artist’s location and patronage and can provide a framework for the dating of uncertain works.13 The Seville paintings fall into a distinct group, reflecting both the prevailing artistic practice—notably, that of his teacher, Pacheco—and the beginnings of Velázquez’s own remarkable technical trajectory.

The Supper at Emmaus is painted on a canvas woven with a pattern of intermittent clusters of small dia-
monds (Figure 3). Patterned cloths of this type, called mantelillo or mantel as opposed to the plainly woven lienzo, are found in seventeenth-century paintings by artists working in Naples, Toledo, and Seville. Zurbarán’s Battle between the Christians and Moors at El Sotillo (MMA 20.104) and El Greco’s The Vision of Saint John (MMA 56.48) are two examples in the Metropolitan’s collection. In Velázquez’s oeuvre, patterned canvases have been identified in The Adoration of the Magi, Mother Jerónima de la Fuente (both Museo Nacional del Prado, Madrid) and Saint Ildefonso Receiving the Chasuble (Excmo. Ayuntamiento de Sevilla). 

These works are all from the Seville period and all have in common religious subject matter. In her study of Velázquez’s early technique, Zahira Veliz notes a 1623 contract for an altarpiece signed by both Pacheco and Velázquez that specifies the central image, The Immaculate Conception, to be painted on mantel and the peripheral images on lienzo; Veliz suggests the mantel may have been considered more attractive or precious, and thus more appropriate for the subject. 

Beyond Seville, Velázquez painted on plainly woven canvas, initially of a rather coarse weave, and subsequently—starting with The Forge of Vulcan—more finely woven; he returned to the use of coarser fabric late in his life. It seems that he never used patterned canvas again.

The widely ranging grounds used by Velázquez during his working life are, in many senses, the most fundamental aspect of his painting technique. The dull brown ground material of The Supper at Emmaus consists of a single layer of a finely divided material, essentially an iron earth or naturally occurring heterogeneous mixture of minerals colored by iron oxide. Within this fine matrix are much larger inclusions of calcite and silica. 

This ground appears close if not identical to the grounds of the Seville period The Adoration of the Magi, Mother Jerónima de la Fuente, Saint Ildefonso Receiving the Chasuble, and Kitchen Scene with Christ in the House of Martha and Mary (National Gallery, London) as well as the ground of a painting by Zurbarán. Such grounds may be characterized as the local “Seville clay” recommended by Pacheco: “The best and smoothest priming is the clay used here in Seville, which is ground to a powder and tempered on the losa with linseed oil . . . one I would use without further modifications, because I see my six canvases in the cloister of the Mercedarians conserved without having cracked nor shown any sign of flaking since the year 1600 when they were begun. . . .” Though Velázquez generally covered the preparation with paint at this period, over time the color of the Seville grounds has contributed to the sonmer tonality of these works due to increased transparency and wear of the overlying paint layers. This effect is most pronounced where the paint layers are thinly applied, as with the figure drinking in the background of The Waterseller of Seville that now appears ghostlike. It has been noted that grounds of similar composition have been analyzed in seventeenth-century paintings from Naples and from Holland. 

In Velázquez’s oeuvre, however, these dull brown grounds are found only in pictures painted in Seville.

Moving to Madrid in 1623, Velázquez adopted the orangey red earth pigment known as “tierra de Esquivilas” that was in common use by painters there as a ground material. 

In several works, including the full-length Philip IV (Museo Nacional del Prado, Madrid), this reddish ground is applied over an initial gray ground (calcium carbonate and organic black). 

The next major change in ground composition is seen in the 1630 Forge of Vulcan, a highly experimental painting from a technical standpoint. The ground is grayish in color, consisting principally lead white. Such a light ground has the potential to impart luminosity to the overlying paint layers, which, here, the artist had applied with tremendous virtuosity, varying his touch from thick impasto to thin and dilute washes of paint in depicting the different elements of the scene. Though Velázquez used a range of hues for his grounds from this time on—gray, beige, and reddish (as in Juan de Pareja)—they remained rich in lead white, a light, reflective surface for the overlying paint. 

Grounds played an increasingly important compositional role, as his brushwork became more open and the overlying paint was applied more thinly, sometimes diluted to the point that the paint dribbled down the canvas.

Velázquez’s early works are characterized by the containment of forms and clearly defined contours, a predisposition that stems from his cultural roots in Seville and, specifically, from his artistic training. Pacheco wrote, “The sure and good grace of the entire work lies in the proper delineation of the figure or history, because it is certain that all the difficulty of painting lies in achieving the contours.” Pacheco’s emphasis on contour is closely related to his stress on the making of careful preliminary drawings, of which a number survive.

Though there are no drawings securely attributed to Velázquez, we know from Pacheco’s comments that Velázquez made studies from life. The recurrence of motifs, models, poses, and compositional elements in both secular and religious works bespeaks the use and reuse of these drawings. Like pieces from intersecting puzzles, the same old woman appears in Old Woman Cooking Eggs (National Gallery of Scotland, Edinburgh) and Kitchen Scene with Christ in the House of
Martha and Mary; the same pile of plates stacked upside down in Two Young Men at a Table (Wellington Museum, Apsley House, London) is to be found in the Kitchen Maid with the Supper at Emmaus (National Gallery of Ireland, Dublin). The similarity of the older disciple’s appearance in The Supper at Emmaus to the head at the right of the man holding the cup in The Feast of Bacchus was one of the reasons that Beruete initially believed this to be a work of 1626–29. In its composition The Supper at Emmaus relates closely to The Three Men at Table (State Hermitage Museum, Saint Petersburg), a bodegón with three figures at a table covered with a white tablecloth, on which are various still-life elements, including the same conceit of a knife protruding from the table’s edge, casting a shadow on the cloth below. That features were studied individually and then arranged as part of a composition is evident in the collagelike quality of these early paintings. Each element is given equal weight, and figures in close proximity to one another remain to some degree disengaged and introspective, contributing to the strangely charged atmosphere.

How elements of the composition were initially laid down on canvas is well demonstrated in The Supper at Emmaus. Some contours were drawn in using a fine brush loaded with black paint, as may be seen with infrared reflectography, an analytical technique that uses infrared radiation to penetrate the upper layers of paint in order to show what lies beneath. Such contours are apparent around the head and the hands of Christ (the far hand is shown in two different positions); the hand of the older disciple; the underside of the outstretched hand of the younger disciple; and at the bottom of the latter’s coat where it meets the bench (Figure 4).

Slender ridges of paint that further delineate certain contours or folds of drapery are a hallmark of Velázquez’s early work. More easily seen in raking light, they may also appear prominently in X-radiographs because of the relative thickness of the paint application and the pigment composition. In The Supper at Emmaus, such ridges or “graphic lines” as they have been termed, are present both as a form of underdrawing and as a buildup of paint at the edge of a broader brushstroke in the composition layers. In a detail of the X-radiograph they can be seen outlining parts of the outstretched hand of the younger disciple and describing some of the folds of Christ’s robe (Figure 3). Graphic lines occur frequently in paintings of the Seville period and may be understood as part of a tradition of attention to contouring, both at the underdrawing and execution stages. They appear less often in the increasingly broadly painted Madrid pictures of the 1620s. The role that these distinctive graphic lines might play in matters of attribution is limited by the fact that Velázquez’s contemporaries have not been subjected to the same degree of technical scrutiny.

Infrared reflectography of The Supper at Emmaus further reveals an interesting phase in the early stages of painting, where the outer contours of certain features are blocked in, rather broadly, with black paint. This is seen very clearly around the outstretched hand, the key feature of the painting (see Figure 4). At the junction between Christ’s sleeve and the tabletop, a black brushstroke overlies the red of the sleeve, showing that this line of definition was not restricted to the underdrawing phase but was, instead, part of the process of painting. Similar strokes—corrections made with brushstrokes loaded with black pigment—have been observed in the infrared analysis of The Adoration of the Magi. Similarly, as may be seen under magnification, the very painterly white highlight in the right background of The Supper at Emmaus, which defines the sinuous contour of the shadowed right sleeve of the younger disciple, was painted after the sleeve but before the application of the brown background. Other contours were further adjusted in the final strokes, as in the curve of the younger disciple’s collar, where it meets the background, and in the neckline of Christ’s robe. Thus, at all stages of painting, the artist defined and refined the contours of his forms. Though his brushwork became more variegated and his forms more interactive, Velázquez’s attention to contour was sustained throughout his life and is one of the most eloquent features of his painting technique. The dynamic contour of the figure in The Dwarf Diego de Acedo, Called “El Primo” (Museo Nacional del Prado, Madrid) is one remarkable example out of many. This aspect of the artist’s technique had a significant effect on later painters and, perhaps, finds its most brilliant reflection in the work of Manet.

An illuminating discovery in recent analytical studies of Velázquez’s paintings is that the range of pigments used by the artist was extremely limited and varied very little throughout his life. This knowledge renders all the more remarkable the ways he manipulated his materials in the development of his increasingly economical mature technique. The number of pigments available to artists across Europe in the seventeenth century, in general, was rather small and fairly constant, with some regional differences due to local sources and trade routes. Even so, it seems that when Velázquez had access to a broader selection of pigments, as on his trips to Italy, he still made a deliberate choice to limit his palette. A further idiosyncrasy is Velázquez’s almost complete avoidance of the green
pigments available to artists at this period, using instead mixtures of blue and yellow. Within the artist’s restricted palette, there are, however, certain distinctions to be made between works painted in Seville and those painted in Madrid and beyond. Whether by choice or economic circumstance, the principal yellow pigment found in the Sevillian paintings is yellow ochre, an inexpensive and widely available earth color. In The Supper at Emmaus, this was the pigment used for the cloak lying over the lap of the younger disciple. The deep green tablecloth is a mixture of yellow ochre and poor quality azurite. Velázquez did not generally use the more costly lead tin yellow until he was working under royal patronage in Madrid. Similarly, the red of Christ’s robe in the Metropolitan’s painting is red iron oxide, another earth pigment, not the more costly vermilion he was to use more frequently from 1623 onward.

Despite the huge difference in the appearance of Velázquez’s early and late works, his attention to the handling properties of his paints is a constant. The artist’s sophisticated and increasingly experimental approach exploited the possibilities of such aspects of technique as the particle size of his pigments, the ratio of pigment to medium, and additives to improve optical and physical properties. The paint medium used by the artist in The Supper at Emmaus was found to be linseed oil, which is consistent with Richard Newman’s analysis of the medium of a number of paintings by Velázquez. Another intriguing discovery emerging from recent studies is the ubiquitous presence of the white pigment calcite as an admixture in Velázquez’s paints. Virtually transparent in oil, calcite would both act as an extender and would improve the handling properties, imparting a stiffer consistency while maintaining transparency. How commonly it was used as an additive by contemporary artists is an area for further study; however, it appears that it was an integral part of Velázquez’s technique early on—it has been identified in samples from almost all the works examined by Garrido Pérez and was found in all the paint samples tested in The Supper at Emmaus. The fluid, painterly touch that is the hallmark of Velázquez’s technique is present in early works like The Adoration...
Figure 5.
X-radiograph mosaic of The Adoration of the Magi
of the Magi, apparent in the long, flowing brushstrokes describing folds in the Virgin’s skirt and in the agitated highlight on her fingernail (Figure 2). The handling of paint in these areas is more clearly seen in the X-radiographs, which map the distribution of the ubiquitous lead white (Figure 5). A very similar touch is seen in the clothing of the younger disciple and in the highlight of Christ’s halo in *The Supper at Emmaus* (Figures 6, 3).

The application of paint in the Metropolitan’s painting is consistent with Velázquez’s Sevillian paintings. The X-radiographs of the early paintings have a distinctive appearance and strong legibility because of the low X-ray opacity of the earth grounds. Individual forms are well defined and contained, and the paint is applied with enormous assurance and subtlety in the creation of coherent three-dimensional form. In *The Supper at Emmaus* this is seen very clearly in the outstretched hand of the younger disciple, a beautiful passage (Figure 3). Though the picture surface is abraded, the X-radiograph presents a strong image of the distribution of paint mixtures containing lead white that are used to depict the dramatically side-lit hand against the modulated background. The paint is handled with great economy of means and extraordinary facility. Such skill is extremely rare and has to be taken into account by those who would question the attribution to Velázquez. Another distinctive feature
of Velázquez’s early technique seen in this painting is the undulating, rather abstract quality of the draperies. Again, the modeling is seen with greater clarity in the X-radiograph due to the compromised condition of the picture surface; consider, for example, the shoulder of Christ’s robe (Figures 3, 6). The draperies of the foremost magus in The Adoration of the Magi compare quite closely (Figure 5), as does the treatment of the jacket of the young man on the right side of The Three Men at Table and that of the broad expanse of the cloak of Saint Thomas (Musée des Beaux-Arts, Orléans), among many examples. This abstract quality works in counterpoint to other parts of the painting—such as the hand of the younger disciple—that are depicted with greater specificity and demonstrate the artist’s close observation of nature. Velázquez’s use of highlights is likewise extremely strategic—only the minimum of what is needed to describe the turn of a cheek or light hitting the rim of a vessel. This is the technique of an artist of extraordinary abilities.

In comparison with later works, few pentimenti are seen in the Sevillian paintings, no doubt because Velázquez’s working method at this time involved the use of studies. Such pentimenti as are found usually take the form of minor adjustments of contour. In The Supper at Emmaus there is a change in the position of the fingers of Christ’s right hand breaking the bread, the outstretched fingers of the younger disciple have been slightly shortened, and the contour of his wrist has been refined.

The constellation of paint trails showing through the overlying paint in the upper right background of The Supper at Emmaus are generally termed “brush wipings,” that is, places where the artist has wiped off excess paint or possibly tried out a color, thereby creating strokes that would have been painted over but that have become visible over time due to the increased transparency of the overlying oil paint. While they are seen in the work of other artists—El Greco is a notable example—they are usually confined to the edges or borders of the painting. The distinctive character of these marks in Velázquez’s paintings—and they are evident in a great many paintings from all periods of the artist’s work—is their relative prominence in the composition, as well the agitated and sometimes calligraphic quality of their application. While one needs to tread carefully here, before reading too much into an artist’s brush wipings, it cannot be ignored that they are wonderfully unconscious expressions of an artist’s hand. The presence of these marks throughout much of the background of a painting like The Dwarf Diego de Acuña, for example, has caused some scholars to speculate that they were meant to show, to some degree, as a way of adding atmospheric or textural effects. It is worth noting, however, that where these effects have been analyzed they are consistent with the paints found in the work, and some are so obscure that they have been revealed only through X-radiography. While they seem to brush wipings only, their presence in the composition is one example of the ease and assuredness—the painterliness—evident in Velázquez’s technique even in his earliest works.

By a happy coincidence of sound technique and safekeeping, many of Velázquez’s paintings have traversed the centuries in remarkably unaltered state; a number, including Juan de Pareja, remain unlined, a rarity among paintings on canvas of the seventeenth century. Unfortunately, the paintings of the Seville period have fared less well, in part, because of the dull brown Seville clay grounds used by the artist at this time. The ground material appears to be overly sensitive to moisture, and its hue has contributed to the overall darkening of these paintings as the oil paints become more transparent over time. The condition of The Supper at Emmaus is severely compromised. The more densely painted flesh tones are the only parts of the painting that remain relatively unchanged: the ear and hand of the younger disciple, the ear and neck of Christ, and the furrowed brow of the older disciple. In addition to a number of large tears in the original canvas, over much of the painting’s surface the paint is cracked and cupped, and the high points of the cupped paint are abraded down to the ground, leaving islands of paint in between. The result of this type of abrasion is a generalized blurred look, far from the effect intended by the artist’s crisp contours and brushwork. Moreover, the colored glazes that would have modified and deepened the tones of Christ’s red and blue robes and the yellow robe in the foreground have all but disappeared, remaining only in the recesses of the underlying brushwork. The high chromatic key of these areas, in their current state, has contributed to some scholars’ placing the painting in Madrid, or at least after his first visit, when the artist would have seen Italian—especially Venetian—paintings unavailable to him in Seville. While condition certainly has been a factor in doubts about the attribution, it is a testament to the authority of the artist’s hand that the painting continues to read as well as it does and to have great presence despite its damaged state.

The entry for The Supper at Emmaus in the catalogue of the 1989 Velázquez exhibition at the Metropolitan Museum comments, as we noted above, on the broad range of dates that have been assigned to the painting. In the context of the recent technical studies of
Velázquez’s paintings, the material evidence for _The Supper at Emmaus_ supports the majority of scholars who have placed the work in Seville and demonstrates, for those who have doubted it, that in its materials and technique _The Supper at Emmaus_ is consistent with Velázquez’s Sevillian works. It is evident that the condition of the painting must also be factored into an assessment of its date and attribution. Within the Seville period, stylistically the painting seems to me to fall in the months following the artist’s initial visit to Madrid and thus may be dated with greater precision to 1622–23. John Brealey, following his stroke, was always eager to know how work on the picture was progressing. Though he never doubted when and where _The Supper at Emmaus_ was painted, it gave him some satisfaction to hear that the very substance of the work is a key to its times and origin.

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I will always be grateful to John Brealey for his eye, his wisdom, generosity, and wit.

NOTES

5. Aureliano de Beruete in a letter dated January 15, 1891, Department of European Paintings Archives, Metropolitan Museum.
8. Velázquez’s early exposure to the work of Caravaggio has been much discussed. Caravaggio’s version of the Supper at Emmaus in the National Gallery, London, treated as a _bodegón_, and employing dramatic gesture and radical foreshortening has strong echoes in the Metropolitan’s painting.
12. David Davies et al., _Velázquez in Seville_, exh. cat., National Galleries of Scotland, Edinburgh (Edinburgh, 1996); _Velázquez y Sevilla_, exh. cat., Centro Andaluz de Arte Contemporáneo, Monasterio de la Cartuja de Santa María de las Cuevas, Seville (Seville, 1999). By stipulation of its bequest, the painting cannot be loaned.
15. Veliz, “Velázquez’s Early Technique,” p. 75; see also McKim-Smith, _Velázquez en el Prado_, p. 111.
16. The range of canvas types used by the artist has been charted by Carmen Garrido Pérez; see Garrido Pérez, _Velázquez: Técnica y evolución_, pp. 53–61; see also McKim-Smith and Newman, _Velázquez en el Prado_, pp. 114–15.
17. I am grateful to Ashok Roy, head of the Scientific Department of the National Gallery, London, for his analysis in 1989 of the ground using scanning electron microscopy and energy dispersive X-ray spectrometry (SEM/EDS). In 2004, samples of the ground were analyzed by James Frantz and Mark T. Wypyski of the Department of Scientific Research at The Metropolitan Museum of Art, using X-ray diffraction (XRD) and SEM/EDS, respectively. In his report, Wypyski notes the overall elemental
composition as mainly silicon and calcium (identified with XRD), along with relatively large amounts of aluminum and iron, small amounts of magnesium and potassium, and traces of sodium, sulfur, chloride, titanium, and lead. In the iron earth matrix, the majority of the particles are in the range of about 1 to 5 microns. The calcite inclusions range from about 10 to 20 microns and the silica inclusions range from about 20 to 40 microns.


20. Veliz, “Velázquez’s Early Technique,” pp. 80, 95, n. 12; Ashok Roy, personal communication, regarding the similarities of this type of ground in seventeenth-century paintings from Spain, Italy, and Holland.


25. In a section concerning preparatory drawings for portraits, Pacheco writes, “My son-in-law, Diego Velázquez, was educated in this doctrine as well; while still a boy he bribed a fellow apprentice to serve as a model in various actions and postures: sometimes crying, sometimes laughing, without exciting any difficulty of drawing. He made many heads from this boy in charcoal and highlight on blue paper, as well as many others from life, with which he gained great assurance in portraiture”: ibid., p. 103.

26. Of note here is the similarity of the composition of The Supper at Emmaus to the central group of Pacheco’s Christ Served by the Angels (Musée Goya, Castres), dated 1616, illustrated in Velázquez y Sevilla, pp. 64–65, no. 25. I am grateful to Zahira Veliz for this observation.


28. Such graphic lines have been observed in works of questioned attribution: Veliz, “Velázquez’s Early Technique,” p. 95, n. 25, and McKim-Smith, “‘La técnica sevillana de Velázquez,’” p. 115, on the Saint John in the Wilderness (Art Institute of Chicago). The technique of the latter painting is discussed in greater detail in Inge Fiedler, Zahira Veliz Bomford, and Frank Zuccari, “Technique and Style: Clues to Authorship in the Chicago Saint John in the Wilderness,” Art Institute of Chicago Museum Studies 31, no. 2 (2005).


31. Verdigris has been analyzed as a constituent of the foliage in Saint John on Patmos (National Gallery, London, inv. no. 6264) and as a constituent in the background of The Immaculate Conception (National Gallery, London, inv. no. 6424); personal communication, Ashok Roy, May 2004. Green earth was identified in small quantities in two paint samples from The Forge of Vulcan and The Surrender of Breda (Museo Nacional del Prado, Madrid); McKim-Smith, Andersen-Bergdoll, and Newman, Examining Velázquez, p. 85.

32. See Garrido Pérez, Velázquez: Técnica y evolución, pp. 34, 77.

33. Thanks to Ashok Roy for his 1989 analysis of pigments from The Supper at Emmaus using SEM/EDS.

34. I thank Richard Newman, Research Scientist at the Museum of Fine Arts, Boston, for his analysis, using gas chromatography–mass spectrometry (GC-MS), of samples from The Supper at Emmaus. For published analysis of the medium used in paintings by Velázquez, see Newman in McKim-Smith and Newman, Velázquez en el Prado, pp. 139–41; the only paint sample that showed a medium other than linseed was the blue in The Consecration of the Virgin (Museo Nacional del Prado, Madrid). See also the results of medium analysis of The Immaculate Conception and Saint John on Patmos in the National Gallery Technical Bulletin 19 (1999), p. 95.

35. See Garrido Pérez, Velázquez: Técnica y evolución, p. 35, and analyses of individual works.

36. Some examples are found in Saint John on Patmos, The Feast of Bacchus, and Juan de Pareja.


38. As in Saint John on Patmos; Ashok Roy, personal communication.


40. Ibid., pp. 80, 95 n. 15.

41. This type of damage is very similar to that seen in Saint Ildefonso Receiving the Chasuble: see Garrido Pérez, Velázquez: Técnica y evolución, pp. 102–11.

42. In a presumed workshop copy of the painting, formerly in the collection of Thomas George Breadalbane, sold at Sotheby’s, New York, January 15, 1987, lot 64, the red robe of Christ is deeper in color, the blue robe over his knee is darker, and the folds in the other drapery have more definition. This copy may reflect something closer to the original color of these areas in the Metropolitan’s painting.
Velázquez: Painting from Life

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In the seventeenth century, Velázquez was said to paint from life, “del natural.” In 2005 we recognize “del natural” and its later correlate, “realism,” as complicated notions expressed in quotes. The reasons for this usage are made clear by recent examinations of two paintings—Kitchen Scene of ca. 1618 in the Art Institute of Chicago and Portrait of Gongora of 1622 in the Museum of Fine Arts, Boston—which show how complex Velázquez’s representation of the world around him could be.

Both paintings were created early in Velázquez’s career, when his rendering of people and objects was starkly naturalistic. In Kitchen Scene (Figure 1), one finds pots and pans that were in daily use in Seville’s kitchens, and a head of garlic next to the mortar used for mashing it. One also sees a dark-skinned figure who is unusual for personnel in most European kitchen scenes but could have existed in Velázquez’s native Seville, where moriscos or former Muslims as well as African slaves worked as domestics. The temptation has always been to see this as a slice of unmediated reality.

Velázquez is famous for the magic of his brushwork even at this early date, and any attribution to him depends at least in part on the quality of the visible strokes. In the case of the Kitchen Scene, the damaged state of the painting and poor restoration for many years placed it in a state of limbo in which no one rejected it wholeheartedly but only a few accepted it unreservedly. Recent treatment has both clarified the painting’s condition and significantly improved its aesthetic appearance, allowing for a more confident assessment. Although the painting has suffered a general loss of subtlety, some key areas, such as the figure’s proper right hand, white shirt cuff, and jacket sleeve, are reasonably well preserved. The still-life objects, in particular the decorated pitcher, copper pot, double-handled jug, and mortar and pestle, also remain quite well preserved, their material character and surface quality rendered with a skill that gives them palpable solidity. Surfaces of objects are animated by painted highlights that faithfully capture the reflective qualities of metal and ceramic. In addition, in the painting of the face, the artist demonstrated an extraordinary ability to use light to define three-dimensional form. Pigment analysis shows that the ground in Kitchen Scene resembles that in securely attributed paintings executed by the youthful Velázquez, such as the Adoration of the Magi of ca. 1619 and Jerónima de la Fuente, signed and dated 1620 (see Appendix, Table 1, and Figure 8).

As is usual in a painting by Velázquez, Kitchen Scene shows pentimenti as adjustments of outline made while painting, here in the brown and white pitchers, the ceramic bowls, and the white cloth and basket.
Figure 1. Diego Rodríguez de Silva y Velázquez (Spanish, 1599–1660). *Kitchen Scene*, ca. 1618. Oil on canvas, 55.7 x 104.5 cm. Art Institute of Chicago, Robert Waller Memorial Fund, 1935.380 (photo: Art Institute of Chicago)

Figure 2. Velázquez. *Kitchen Scene with the Supper at Emmaus*, 1618. Oil on canvas, 53 x 118 cm. National Gallery of Ireland, Dublin, 4538 (photo: National Gallery of Ireland)
hanging on the wall. The placement of the bowls on the table has been revised, and outlines have been subtly altered in order to produce a more refined composition (Figure 3). The original position of the upside-down pitcher was such that it would have covered the foot of the white pitcher. This would have been a visually ambiguous detail in that the contact point of the pitcher and table would have been blocked from view. By shortening the height of the upside-down pitcher, the artist revealed just enough of the foot of the white pitcher to clarify its position and connection to the tabletop.

In 1724 Antonio Palomino commented on a bodegón by Velázquez in which he detailed many of the items visible in the Kitchen Scene: a small copper pot, "a clay jug, some dishes and bowls, a glazed pitcher, a mortar and pestle, and a head of garlic next to it; on the wall can be seen a wicker basket with a cloth and other truffles." Palomino tells us that there is also a human figure: "Watching over all this is a boy with a carafe in his hand and an escuifet on his head, which, together with his very bumpkin-like costume, makes him a very ridiculous and amusing figure." The Kitchen Scene cannot be the same as the bodegón described by Palomino because his painting contained a conspicuous pot of crabs boiling over a fire, a detail nowhere to be found in the present picture. The Chicago canvas has cusping on all four sides, so it has not been cut down by enough to have had a major scene on a missing piece of canvas, and no boiling crabs appear in the radiographs or the infrared examination. In addition, Palomino’s description does not fit the Kitchen Scene with the Supper at Emmaus of 1618 now in the National Gallery of Ireland (Figure 2). But the many other details of Palomino’s text, which do correspond with the Chicago painting, establish that we are dealing with a variant of the picture he saw.

What does the existence of variants of a scene suggest about how Velázquez made his bodegones? What is their relationship to the natural elements they claim to represent? Both the infrared examination and Palomino’s text indicate that the Chicago Kitchen Scene was assembled from a repertoire of preexisting motifs instead of created firsthand from objects before his eyes. The hanging basket, copper pot, and decorated pitcher in the Chicago image are also found in other bodegones, such as An Old Woman Cooking Eggs in the
National Gallery of Scotland, and the stack of upside-down plates is repeated in *Two Young Men at Table* in the Wellington Museum, Apsley House, London.

Also visible in infrared reflectograms as well as in X-radiographs are the very fine graphic contour lines first observed in Velázquez’s early works by Zahira Véliz.6 These thin, sometimes radiographically opaque lines applied with a stiff pointed brush often stand in relief on the canvas. Such lines are visible in the Chicago painting along the outlines of the face and costume. A fine black outline appears along the right contour of the yellow crock, and light contour lines are found along the upper edge of the copper pot and in the stacked plates (Figure 3). A line also establishes the edge of the face (Figure 4).7 We will discuss these fine lines again later, as they also appear in the *Portrait of Góngora*, which, unlike the *Kitchen Scene*, was painted directly from life.

Palomino regards the gender of the painting’s only figure as male.8 Yet until 1649, when Palomino’s comments were first linked to the painting, the servant was often described as female because of “her” derivation from images in a Netherlandish tradition of young women in a kitchen.9 It is difficult to come to a firm decision about gender if we look at this painting in isolation, and it is equally difficult if we place it in one of the two possible contexts, since the decision would depend on which context we choose. If we situate the painting in the pictorial tradition of the Netherlandish kitchen scene,10 the figure should be female, whereas if we consider written references to the staffing of kitchens in Spain at this time, the figure could be male. For example, a trial in 1578, in the aftermath of the courtier Antonio Pérez’s death, mentions a kitchen boy or *pícaro de cocina*; a cookbook in 1611 argues for the reformation of kitchen staffs because of what seems to have been a plague of kitchen boys or *mozos de cocina*, which the author says dates back to the times of Philip II and Philip III.11 A *mozo de cocina* or *pícaro de cocina* was a young male who frequented kitchens in sixteenth- and seventeenth-century Spain, when orphans and street children were plentiful.12 For the purposes of interpreting this painting, it is significant that kitchen boys became a category in novels and documents from the latter half of the sixteenth century onward. The relationship of the literary phenomenon of the *pícaro* to the pictorial genre of the *bodegón* has been debated without resolution, but it is clear that kitchen boys were topical as subjects. At the same time, however, girls in Spain certainly also worked as domestics.13

If this is a female, Velázquez’s solemn treatment of her is emphatically different from Continental kitchen scenes where the woman is treated as eye-candy. The expectation that a maid surrounded by comestibles should be sexually appealing is spelled out explicitly in a contract made in Lombardy in 1588 in which the patron specifies a series of genre scenes, one with a “donna bella e gratiosa con il petto scoperto” surrounded by game, another with a “fruttarola bella e gratiosa,” and yet another with “certe donne belle et gratoie che fanno cuscina.”14

A review of the costume in Velázquez’s *Kitchen Scene* does not settle the question of gender,15 although the opening in the jacket just above the waist, which allows the white shirt to peek through, is usually seen in costumes of males. When we turn to the turban, Palomino’s “escofeta” is a fabric head-covering of almost any form and is worn by both men and women in Spanish images.16 The figure’s African ancestry complicates the reading of hairdressing conventions. Possibly the implication is that this servant is a *morisco*, or someone of Moorish descent, and the recent expulsion of Muslims from Spain in 1611 might have been part of the unspoken associations of the viewer of about 1618. Yet sub-Saharan slaves had also been imported into Andalucía, and so the meaning of the ethnic and racial reference is another question that is not easily resolved.17

Palomino described the painting he saw as depicting “a figure who is very *ridículo, y gracioso,* and he also clues us to read the clothing as an indication of social rank, emphasizing the *villani simo trage*, or “very bumpkin-like clothing.” Unlike high-fashion dress worn by the nobility, the garment here is not only loose but also made of common wool that is not embroidered. The modern viewer sees nothing ridiculous or comical in these simple clothes, or in the face of the unsmiling adolescent; to us the figure possesses a kind of dignity in poverty. But observers from Velázquez’s time to Palomino’s were familiar with a tradition of aesthetics that associated the lower classes with the burlesque.18

Velázquez’s painting combines standardized motifs adapted from well-known Netherlandish engravings with realistic details from daily life in Seville, and this combination of the familiar and the new helped popularize the genre of the *cocina* in Spain. Throughout his career Velázquez famously refused to quote ideas from other artists; that resistance to copying openly may have pushed him to disrupt the established rules of the kitchen genre. His figure’s stereotyped gender should be female, but Velázquez’s intervention may be to tweak her formulaic figure and the long tradition of pretty girls in kitchens. Velázquez cites just enough of the Netherlandish model for us to pick up the refer-
ence, but he then gives us a Spanish Moor instead of a Flemish maid. He goes further. By means of a veneer of underdrawn contours filled in with a thin layer of paint, he makes us forget that the entire image can also be seen as a reprise of a faraway engraving because he catches the mahogany flesh, cheap fabric, and glazed pottery of real life.

The Portrait of Góngora in the Museum of Fine Arts, Boston (Figure 5), is a painting that was created directly from the living sitter, at least according to Francisco Pacheco, Velázquez’s most reliable biographer. We therefore expect it to be an on-the-spot transcription of the features of Luis de Góngora, one of the most renowned men of letters of Spain’s siglo de oro. But is resemblance to the sitter typical of a portrait by Velázquez?—not of Velázquez’s royal portraits, which record men and women he knew intimately yet which were sometimes reworked over an earlier image or even painted over a studio pattern.¹⁹

Written before 1638, Pacheco’s Arte de la pintura contains the earliest and most reliable descriptions of the paintings of Diego Velázquez. Not only was Pacheco a painter himself but he was also Velázquez’s teacher and father-in-law. Unlike the remarks of many early raconteurs of art, Pacheco’s comments are brief, emphasizing the dates and other facts, which are often supported by archival documents. Pacheco is thus a gold standard of reliable documentation, so
when he tells us that in 1622 the young Velázquez traveled from his native Seville to Madrid, we have every reason to believe him. And Pacheco added: “He made at my request a portrait of don Luis de Góngora, which was very much praised in Madrid.”

The portrait must have been praised enthusiastically indeed, since there are early copies of it in oil. For decades it has been clear that the version in Boston should be the image described by Pacheco, because a radiograph revealed dramatic pentimenti that record Velázquez’s changing thoughts as he painted. A new radiograph enhanced with digitized image processing, and a infrared reflectogram, make the revisions even more legible (Figures 6, 7).

What is the relationship of the Portrait of Góngora to the man it represents? A portrait must capture the likeness of an individual, and Pacheco made it crystal clear that resemblance is the point: “se cumpla con lo parecido, porque éste es el fin del retrato” (so that resemblance may be achieved, because that is the purpose of the portrait). Yet Góngora was an illustrious individual, and the portrait was probably painted for Pacheco’s Libro de Retratos, a visual compendium of famous Spaniards. Did Velázquez adjust the image to communicate the agenda of distance and deference, an honorific status in which reality cannot pretend to be unmediated and whose format must harmonize with the other portraits in a series?
Velázquez’s purpose in traveling to Madrid in 1622 was presumably to show his talents to the young King Philip IV, who only recently had ascended the throne and needed a new court painter. Pacheco’s text betrays this unspoken ambition when his description of the painting of Góngora is followed without a transition by the statement “and at that time there was no opportunity to portray the King and Queen, although this was attempted.” So the Portrait of Góngora was the only chance Velázquez would have to show what he could do on this trip, and he made sure that it was seen: “fue muy celebrado en Madrid,” which no doubt helped to get the desired royal audience when he returned to try again in 1623. But when he first touched brush to canvas in 1622, Velázquez may have been thinking of his native audience in Seville, and this young painter of bodegones was sufficiently confident of his talent at painting “from nature,” to cover the poet’s balding head with wildly overgrown leaves that are neither classizing nor flattering (Figures 6, 7). Yet the painter quickly had second thoughts. He must have realized that framing the head with absurdly disorderly leaves, however natural, would not make a suitable portrait in the eyes of decorum-conscious court circles in Madrid, and he covered his mistake. He developed the wreath fairly fully before rejecting it, because the outer edges and veins of some leaves, like the one directly above the poet’s head, are carefully described. Cross sections do not reveal any dirt or varnish trapped between paint layers (see Appendix and Figure 10), so a long period of time did not pass between inventing the wreath and deleting it, and the portrait was probably not circulated publicly with the leaves; furthermore, none of the surviving painted or engraved images of Góngora show the wreath on his head. Later in his career, Velázquez habitually revised as he painted, and his pentimenti tend to belong to the initial process of
creation; that seems to be true already here in 1622. The other painted versions of this portrait appear to have no significant pentimenti anywhere; the painting in the Prado, for example, has only a minor adjustment of outline on the shoulder.26

If this is the record of the painter’s working directly from the live model in Madrid in 1622, why are there not more pentimenti in the body? It is probable that changes beyond the laurel wreath are few, since Velázquez was using a standardized pattern for the bust and was painting the head directly in Góngora’s presence. As Pacheco tells us, Velázquez made the portrait at his request, and very likely Pacheco wanted the picture so that he could produce an engraving for his Libro de Retratos. In Pacheco’s series, the features of these famous men were varied, but their bodies were standardized: a bust whose shoulders turned to the left or the right, and in the case of poets like Góngora, often a wreath of small, neat laurel leaves to crown the head. In the Boston version, there is only a slight revision apart from the huge laurel wreath. A shift of outline along Góngora’s proper left refines the contour of his shoulder (Figure 6).27

Velázquez’s training in Pacheco’s workshop prepared him mentally to paint the bust of Góngora, and the local Sevillian materials he took with him to Madrid prepared him on a more practical level. Pigment analysis of the Portrait of Góngora reveals that its ground resembles that preparation layer in other Sevillian paintings by Velázquez, and it also resembles the pigments in the ground of the Chicago Kitchen Scene (see Appendix, Table 1, and Figures 8–10). While Velázquez’s Sevillian grounds are not unique in the history of seventeenth-century materials, they are significantly and consistently different from the pigments used in many of his later paintings, after he moved to Madrid. Instead of the dark Sevillian grounds, he set a different tone for his
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Table 1. Chemical composition of grounds of Sevillian paintings by Velázquez

Madrid canvases by using a very bright red preparation in the mid-1620s; that changed to grounds of a lighter tonality in paintings after about 1630, setting the stage for the more luminous images that eventually occurred later in his career.²⁸

Possibly Velázquez's preparation for his trip extended beyond taking his paints with him from Seville. There are signs of cupping or scalloping caused by the tension of pulling the canvas over its wooden stretcher on the bottom and right edges of the canvas, whereas there is no cupping on the other edges. The composition does not appear to be cropped, and the canvas could have been primed in either Seville or Madrid and then cut down to make this picture. In other words, perhaps Velázquez brought a piece of primed canvas with him.²⁹
One tends to assume that a painter’s working procedures—and here one thinks of the palpable but very fine underdrawings that establish the edges of the figure’s cheek in the Kitchen Scene (Figure 4)—may change to reflect more intimate access to a live model. In the case of Velázquez’s Portrait of Góngora, the assumption is true only in some procedures, like the rejection of the dramatic laurel leaves, but false in others, like the habit of situating the figure on the canvas by thin but bodied lines. These lines can be described as raised, dense, or opaque brushstrokes. In the Kitchen Scene (Figures 1, 4), all Velázquez had to do was transcribe a formula for an anonymous servant—a formula that can be seen in other versions of the same face (Figure 2). In the Portrait of Góngora, however, the challenge of creating a likeness rose to a higher level, for Velázquez was confronted with a famous individual whose unique presence had to be captured and conveyed. Whether in the Kitchen Scene or the Portrait of Góngora, the figure’s placement on the canvas was established by thin but assertive lines, drawn with a stiff brush and thick paint. When an adjustment was contemplated for the outline of Góngora’s shoulder and arm, the same bodied lines that set the boundaries of the servant’s cheek were again brought into play. This change of design in the shoulder of the Portrait of Góngora is hard to read in the radiograph because of parallel lines that run along the edge of the pentimento, but these are simply the mark of the residue of paint that accumulated along the edges of a single brushstroke (Figure 6).

The underdrawing is different: an extremely thin but palpable line runs along the edge of the pentimento along Góngora’s arm and shoulder. It is visible, especially under magnification, because the black paint differs in color from the paint used to render the lay cleric’s clothing. A different type of fine line, in this case light colored and more bodied, describes the contours of some of the laurel leaves. The initial borders of some of the laurel leaves were also laid out in raised lines that still stand off the canvas even after lining.

Velázquez’s graphic technique remains largely the same regardless of whether he is working from a studio pattern, a mental model, or directly from life. The Kitchen Scene does not have dramatic changes of design like the laurel leaves eliminated from the Portrait of Góngora, but the occasional small alteration of a contour can be seen. This attention to contours, revealed by very thin underdrawings, is one of the most interesting characteristics of both the Kitchen Scene and the Portrait of Góngora. The young artist would eventually endear himself to the Impressionists by developing free, blurring brushwork as his signature touch, but here at the beginning of his career, he obeyed the studio training so common in Spain, in which students copied linear engravings rather than drawing from live models. This loyalty to the line was voiced by Pacheco, who advocated laying out the picture with clear outlines, “en que consiste la certeza de lo parecido” (in which consists the accuracy of the resemblance), and advised making a linear drawing before beginning to paint, insisting that the “accuracy of the resemblance” depends on this tightly controlled foundation. As we see in these early Velázquez paintings, the pupil obeyed his master and followed his instructions, and he anchored people and paraphernalia by means of sharply defined underdrawings. These are fragments of lines rather than continuous contours, but they are enough to orient the artist as to where things should go.

Judging from the new details discovered in our examination of Velázquez’s two early paintings, Pacheco has given us both a conventional story and an accurate account of Velázquez’s training. Pacheco advised crisp lines, and we find vestiges of such precise markings in Velázquez’s fragmentary underdrawings. Pacheco finished his text on portraiture with the tale of his son-in-law’s learning to make portraits not by painting but by drawing, bribing a country boy to assume different poses, which he recorded in sketches, “con que granjéó la certeza en el retratar” (and thereby he gained assurance in portraiture).

At this early point in his career, Velázquez’s working procedures are assertively personal when he flouts Pacheco’s rule against pentimenti or makes incomplete underdrawings and unexpectedly compliant in enacting the forceful philosophy of his master, who taught him the first principles of painting from life.

ACKNOWLEDGMENTS

We gratefully acknowledge the participation of Bonnie Rimer, who captured the infrared reflectograms of the Kitchen Scene in the Art Institute of Chicago. Ronni Baer in the Museum of Fine Arts, Boston, and Martha Wolff in the Art Institute of Chicago have given valuable advice on historical questions. Gridley McKim-Smith was aided in the preparation of the manuscript by Lori Kata and Jennifer Webb.
NOTES


2. Inge Fiedler has identified the following pigments in the Kitchen Scene: lead white, lead-tin yellow type 1, iron-oxide yellow, vermilion, red lake, iron-oxide red, red lead, burnt sienna, azurite, smalt, possibly some organic brown, iron-oxide brown, and charcoal black. Chalk, quartz, and some silicates were also identified in many of the pigment mixtures. These pigments correspond to those identified in other works by Velázquez: Richard Newman’s discussion of pigments used in the grounds of Velázquez’s paintings in the Prado Museum can be found in Gridley McKim-Smith, Greta Andersen-Bergdoll, and Richard Newman, Examining Velázquez (New Haven and London, 1988), and “Observaciones acerca de los materiales pictóricos de Velázquez,” sec. 4, “Preparaciones,” in Gridley McKim-Smith and Richard Newman, Velázquez en el Prado: Ciencia e historia del arte (Madrid, 1993), pp. 120-51. See also Carmen Garrido Pérez, Velázquez: Técnica y evolución (Madrid, 1992).

3. “Igual á esta es otra, donde se ve un tablero, que sirve de mesa, con un alnafet, y encima una olla hirviendo, y tapada con una escudilla, que se ve la lumbre, las llamas, y centellas vivamente, un perolillo estañado, una alcatraya, unos platos, y escudillas, un jarro vidriado, un almirez con su mano, y una cabeza de ajos junto á él; y en el muro se divisa colgada de una escarpia una esportilla con un trapo, y otros baratijas, y por guardar de esto un muchacho con una jarra en la mano, y en la cabeza una escofita, con que representa con su villainísimo trae un sugeto muy ridiculo, y gracioso,” Antonio Palomino de Castro y Velasco, El parnaso español pintoresco laureado, vol. 3 of El museo pintorico, y escuela óptica (1724; 2nd ed., Madrid, 1798), p. 480.

4. Approximately one-quarter of an inch along the entire bottom edge is filled and inpainted. In the area of the pitcher, the fill is about half an inch wide. It is estimated that the canvas would have to have been at least one inch wider at the bottom edge for the entire pitcher to have been included. It is possible that one or two inches could have been lost, given the amount of cropping that remains.

The cropping of the pitcher placed upside down on the table below the decorated pitcher is particularly curious. Although the bulbous base of the pitcher is shown, its neck rests outside the compositional frame. It is unclear whether this is indicative of a daring artist experimenting with radical cropping or if it is circumstantial evidence that the painting has been trimmed at the bottom.

The painting is on a plain weave canvas support of 9 threads per cm (vertical) by 12 threads per cm (horizontal).

5. Rosemari Mulcahy notes that in the Dublin painting, “There is damage along the edges of the canvas, which has been cut down on the right and left side by at least 6 cms. combined.” Mulcahy, Spanish Paintings in the National Gallery of Ireland (Dublin, 1988), p. 79.


7. Another Spanish painting in which these features have been clearly observed is the Saint John in the Wilderness in the Art Institute of Chicago. This painting was attributed as an early Velázquez by August L. Mayer and has since been classified more broadly by the Art Institute and numerous scholars as a Sevillian school work. The presence of distinct, beautifully formed outlines and the artist’s general emphasis on contours raise the question of whether this should be interpreted as evidence that other artists of the Sevillian school practiced this technique. It remains to be fully understood what extent this practice of outlining contours with fine lines was unique to Velázquez, whether it was practiced by a limited circle of intimately connected artists, or if it had wider application in Andalusian painting. See August L. Mayer, “Two Unknown Early Works by Velázquez,” Burlington Magazine 40 (January 1922), pp. 3–9.

8. In view of the clear assertion of maleness by Palomino, one can understand why José López-Rey suggested that it was likely that the figure in these paintings by Velázquez was a young man. López-Rey, Velázquez, vol. 2, Catalogue Raisonné/Werkezeichen, p. 42.

9. The connection with Palomino’s text was noted by Martin S. Soria, “An Unknown Early Painting by Velázquez,” Burlington Magazine 91 (May 1949), pp. 127–28, who says, “We can take Palomino’s word for it that a boy is represented” and correctly associates the images with the Supper at Emmaus iconography, in which case, “a boy would be more fitting than a girl.” Soria mistakenly believes the Chicago painting has been cut down substantially (see note 4 above).


12. For the general picture of social disruption in Velázquez’s hometown, see Mary Elizabeth Perry, Gender and Disorder in Early Modern Seville (Princeton, 1990).
13. It is difficult to judge exactly how references to women doing household tasks in archival documents relate to paintings listed in death inventories or to poetic mentions in songs. Records in archives indicate that young girls often worked as domestics. At the level of pictorial representation, Velázquez produced a lost kitchen scene with a woman grinding garlic, listed in a 1637 inventory in Seville (Jonathan Brown and Richard Kagan, “The Duke of Alcalá: His Collection and Its Evolution,” Art Bulletin 69 [June 1987], pp. 231–35). The existence of a balladic tradition, which comments, “Y la morisca tendera/que solo fregara platos,” raises a similar question regarding whether the verse is accurate documentary reportage or a poetic commonplace; see Agustín Durán, ed., Romancero general; o, Colección de romances castellanos anteriores al siglo XVIII (Madrid, 1851), p. 191. Both boys and girls appear in surviving genre and kitchen scenes; in addition to the bodegones of Velázquez, see Juan de Esteban, Kitchen Scene, Museo de Bellas Artes, Granada; Francisco López Caro, Picaro de cocina, private collection; Anonymous, Kitchen Scene, Galería del Peraldo, Palacio Arzobispal, Seville.


15. The rather shapeless dark wool jacket, fastened at the neck, is worn by both men and women in paintings and sculptures.

16. See Ruth Matilda Anderson, Hispanic Costume, 1480–1530 (New York, 1979); Carmen Berní Madrazo, El traje y los tipos sociales en El Quijote (Madrid, 2001). For ecfeta, see Sebastián de Covarrubias Orozco, Tesoro de la lengua castellana, o española (1611; Madrid, 1984), p. 537; b. 41, for escota as a form of cofa and p. 333, a. 33, for cofa as a netted head-covering for women and ecfeta as its derivative.

17. For slaves in Seville, see Antonio Domínguez Ortiz, Desde Carlos V a la Paz de los Pirineos, 1517–1660 (Barcelona, 1974), pp. 101–5; Alfonso Franco Silva, La esclavitud en Sevilla y su tierra a fines de la Edad Media (Seville, 1979); José Luis Cortés López, La esclavitud negra en la España peninsular del siglo XVI (Salamanca, 1989); Antonio Domínguez Ortiz, “Sevilla en la época de Velázquez,” in Velázquez y Sevilla, pp. 18–31; Perry, Gender and Disorder, p. 4; Alfonso Franco Silva, La esclavitud en Andalucía, 1450–1550 (Granada, 1992).


19. See Brown, Velázquez, pp. 34–35.


22. Pacheco, Arte de la pintura, p. 528.

23. For this book of images, see Francisco Pacheco, Libro de descripción de verdaderos retratos de ilustres y memorables varones, ed. Pedro M. Piñero Ramírez and Rogelio Reyes Cano (1599; Seville, 1985).


25. “y por entonces no hubo lugar de retratar a los Reyes, aunque se procuró.” Pacheco, Arte de la pintura, pp. 293–4.


27. The thick stroke of paint, visible in the radiograph, boldly “draws the outline of the shoulder. The same appears to have happened on the other shoulder, but less boldly.


29. The thread count in the canvas is 13 threads per cm (vertical) by 13 (horizontal).


32. Ibid., p. 528. Pacheco’s well-known description of Velázquez’s training says: “He used to bribe a young country lad who served him as a model to adopt various attitudes and poses, sometimes weeping, sometimes laughing, regardless of all difficulties. And he made numerous drawings of the boy’s head and of many other local people in charcoal heightened with white on blue paper, and thereby he gained assurance in portraiture.” Pacheco, Arte de la pintura, pp. 527–28; translated in Harris, Velázquez, pp. 94–95. To understand the conventionality of drawing boys and girls laughing and crying, see Vasari’s description of a drawing by Sofonisba Anguissola of “una fanciulla che si ride di un putto che piange, perché avendogli ella messo innanzi un canestrino pieno di gamberi, uno d’essi gli mordi un dito” in Giorgio Vasari, Le vite de’ più eccellenti pittori, scultori ed architettori, ed. Gaetano Milanesi (1568; Florence, 1908), vol. 5, p. 81. We are grateful to David Cast for advice on Vasari’s text.
APPENDIX

The Ground Layers in *Kitchen Scene* and *Portrait of Góngora*

The brown-colored grounds of both the *Kitchen Scene* (Figure 1) and *Portrait of Góngora* (Figure 5) are made from a brown earth pigment, to which some lead white was added, applied in a single layer. Like most natural earth pigments, this brown earth contains different minerals, present in grains or crystals of various sizes. Figures 8 and 9 are photomicrographs of cross sections from the two paintings, showing the ground layers. The images were taken in a scanning electron microscope (SEM) using a back-scattered electron detector, which shows grains in different shades of gray according to their composition. Grains containing heavier elements (elements with higher atomic numbers) are lighter shades of gray in the images than those containing lighter elements (elements with lower atomic numbers). Using an energy-dispersive X-ray spectrometer (EDS) attached to the SEM, the types of different minerals in the grounds were identified. Larger angular grains are mainly calcite (calcium carbonate); occasional grains of dolomite (calcium magnesium carbonate) are also present. Some larger grains of quartz are also present. The finer-grained material contains iron oxides, mica, and probably clay. Both grounds contain scattered small rounded clusters of iron sulfide (pyrite). Although not identical in appearance in the two paintings, the brown earth in both could well be from the same geological source.

Table 1 on page 87 gives the overall chemical compositions of different areas of brown ground layers from the two paintings in Chicago and Boston, and two early Velázquez paintings from the Prado Museum. For this table, small randomly selected areas of grounds in cross sections from the paintings were analyzed. There are variations from place to place in a given cross section because the grounds are inhomogeneous in composition on a microscopic scale. The calcium detected in these analyses is mostly from the fairly large calcite grains, the lead from very small crystals of lead white pigment, while the sulfur is probably mainly from iron sulfide. The overall chemical composition, mineralogy, and texture of the brown earths indicate that they could all be from the same source. This brown earth typically makes up the ground in paintings Velázquez executed in Seville. After he moved to Madrid, he began to use a different type of ground.

Painted-out Wreath in *Portrait of Góngora*

Two very small chips of paint were taken from the area of the painted-out wreath and prepared as cross sections. Both cross sections included the upper paint layer(s) and at least part of the green layer of the underlying wreath but did not include any of the ground layer. Figure 10 is a photomicrograph of one sample taken in a scanning electron microscope using back-scattered electron imaging. At the top is a single thin brown-colored paint that contains lead white, (probably) charcoal black, and some earth pigment. This sits on top of the single green paint layer of the wreath. The green color was made by a mixture of lead-tin yellow and azurite, a common way that Velázquez and other artists of his period used to make intense greens. The overpaint layer is firmly bonded to the green paint below, and there is no indication of any dirt trapped between the layers, or residues of a varnish or coating. This suggests that the overpaint could have been applied very soon after the green layer.

Analytical Procedures

Samples were examined in a JEOL JSM-6460LV scanning electron microscope with an attached Oxford Instruments "INCAx-sight" energy-dispersive X-ray spectrometer (EDS) and INCA 200 wavelength-dispersive spectrometer (WDS). Analyses were carried out in low-vacuum mode with a specimen chamber pressure of 35 pascals at 20 kV. Compositional analyses were carried out by standardless quantitative analysis using Oxford INCA software. Samples from the Prado paintings were taken during an earlier project but were reanalyzed for this paper.
The Golden Age by Joachim Wtewael

WALTER LIEDTKE

Curator, European Paintings, The Metropolitan Museum of Art

John Brealey’s years at the Metropolitan Museum were a golden age for people who love paintings. It was a time when curators and collectors would visit the conservation studio to be brusquely greeted and enlightened by a man who suffered fools, or at least the ill-informed, with unexpected patience and generosity. “Let me refresh your memory,” he would say of a picture that he had unobtrusively transformed, often by undoing past intrusions.

The extraordinary quality and nearly perfect condition of Joachim Wtewael’s small painting on copper The Golden Age (Figure 1, Colorplate 6) would have been greatly admired by John. As a connoisseur of drawings he would also have appreciated the suave sketches in which Wtewael worked out the composition (Figures 2, 3), sketches made partly in response to examples by two of the most celebrated draftsmen of the day, Hendrick Goltzius and Abraham Bloemaert (see Figures 4, 5).

It has been two millennia since Ovid, Virgil, Lucretius, and other Roman poets, following the much earlier lead of Hesiod, described an early epoch in the history of mankind as a Golden Age, when men and women lived in an unregulated Garden of Eden. Already with Virgil, and routinely in the Renaissance, the idea of a Golden Age was politicized to denote a period of ideal rulership, although the need for government and law is dismissed in the most popular version of the mythological story, Ovid’s bucolic account in Metamorphoses (bk. 1, lines 89–112). One sign of man’s decline in the later ages that Ovid describes, those of silver, bronze, and iron, would appear to be the misuse of the classical metaphor, so that a “Golden Age” could be discerned in sixteenth-century Florence or seventeenth-century Amsterdam. If one expects to find not innocence but sophistication in a Golden Age, then the early 1600s was such a time in the lives of Dutch artists such as Wtewael, Goltzius, and Bloemaert, and in the life—at least the aesthetic life—of the collector who (as discussed below) appears to have acquired The Golden Age shortly after it was painted in 1605, Emperor Rudolf II.

Neither Wtewael nor his exquisite painting on copper conforms to common notions of art and artists in the Golden Age of the Netherlands. Wtewael could be described as the most consistently Mannerist Dutch or Flemish painter of the period, although the naturalistic qualities found even in some of his most stylized compositions, including this one, lend the works a distinctive flavor. One often has the sense of seeing flesh and blood figures in bizarre circumstances rather than fantasies tinged by observations from life.

The time and care that went into a painting like The Golden Age could not have been afforded by most artists of the time, nor could they have been compensated sufficiently by the average patron. In 1604, the Vasari of the Netherlands, Karel van Mander, referred to some distinguished collectors who had “excellent and subtle” works by Wtewael, such as the “many small pieces of excellent precision and neatness” that were owned by “Joan Ycket” (Jan Nicquet) in Amsterdam. However, Wtewael appears to have painted mainly for his own pleasure, and to have retained a large part of his oeuvre. In 1669, his granddaughter Aletta owned thirty paintings by the artist, most of which were probably passed down to her by his son Peter or his daughter Antonietta (Aletta’s mother). A little more than a hundred paintings by Wtewael are known today.

Although good biographies are available elsewhere, it might be helpful to review some of the essential details of Wtewael’s life. A near contemporary of Abraham Bloemaert (1564–1651), Wtewael was born in Utrecht in 1566 and died there in 1638. According to Van Mander, the teenaged artist trained to be a glass painter like his father, Anthonis Wtewael, but then studied oil painting for a couple of years with Joos de Beer (fl. 1575–d. 1591), a former pupil of the famous Antwerp master Frans Floris (1519/20–1570). (This would have been in the mid-1580s, a few years after Bloemaert’s brief tuition with the same Utrecht...
artist.) Wtewael then went to Italy, where he entered the service of Charles de Bourgneuf de Cucé, bishop of Saint Malo. Van Mander reports (probably on the basis of the artist’s own account) that this arrangement lasted for two years in Italy and then two years in France, and that “during this time Wtewael [sic] painted many things for the Bishop and all from his imagination, after his own invention.”

Most Dutch artists who went to Italy during this period came from families that had the means to cover the considerable expense and loss of income. The Wtewaels had been members of the educated middle classes for several generations. One of the artist’s uncles earned a doctorate in law; another uncle and Joachim’s older brother Johan were notaries. In May 1595, the humanist scholar Aernout van Buchell (1565–1641) noted in his diary Wtewael’s recent marriage to Christina van Halen, the daughter of a shoemaker. Van Buchell was a distinguished antiquarian and amateur of the arts who in his journal, Res Pictoriae, records that in addition to painting, Wtewael “excels so much in sculpture that for it he has long since won the highest praise from the greatest and highest intellects.” No sculpture by Wtewael is known to have survived, but Van Buchell’s remark is relevant to what James Draper has described as the “Giambolegneseque figural know-how” demonstrated in The Golden Age.

In 1596, Wtewael and his wife bought a large house on the broad Oudegracht in Utrecht, and the couple’s first child, the painter Peter Wtewael, was born. Joachim Wtewael was a dedicated businessman, to Van Mander’s regret. The biographer wonders in the Schilder-boeck that “our Pictura is so well disposed [to Wtewael], given that she is held or exercised by him only in second place, whenever commerce, which comes first, tolerates it or allows him the time.” Perhaps he will become completely tangled up in his flax business, Van Mander continues (in his redundant way), “just as Arachne became stuck and entangled in her web through the wrath of Minerva.” During his lifetime Wtewael invested well over 25,000 guilders, at a time when a skilled craftsman might have earned five or six hundred guilders annually. When the Dutch East India Company (VO) was formed in 1602, Wtewael and his brother each bought nine hundred guilders’ worth of shares, which brought exceptional returns (25 percent per annum in the early 1620s). In 1614, the painter purchased five small houses behind his own, and in 1619 and 1625 he acquired, as investments, various other properties on the Oudegracht.

Wtewael was a prominent figure in local society as well as in the world of art. In 1618, he was part of a delegation that petitioned the Dutch stadtholder Prince Maurits to dissolve the Utrecht city council, which resulted in his own lifetime membership in the municipal government. He was also active in the Reformed Church and in charitable organizations. By contrast, he never held office in the painters’ guild (which, however, he helped found in 1611), and as a teacher he had only a few minor pupils.

A taste for classical literature is suggested by the numerous mythological subjects Wtewael depicted and by his clever interpretations, which must have benefited in most instances from consulting the proper source. The theme of the Golden Age (Aetas aurea) was adopted from the opening pages of Ovid’s Metamorphoses, which was the primary source for mythological stories in Netherlandish art from the late sixteenth century onward. Illustrated editions in translation or with vernacular paraphrases of the poem were widely available, beginning with a small book published in Lyons in 1577. This influential volume features woodcuts by Bernard Salomon illustrating 175 episodes from Ovid’s fifteen books (or chapters), each of which is accompanied by French or Dutch verses concisely summarizing the specific tale. The second edition of a Dutch translation by Johannes Florianus, published in Antwerp in 1566, is illustrated with 178 woodcuts after Virgil Solis, who had freely copied Salomon’s illustrations (thus reversing them) for use in two German editions of 1563. Various editions and series of engravings followed, including fifty-two prints after Hendrick Goltzius (see Figure 4; the first forty engravings were published in 1589 and 1590), and a series of 132 prints by Crispin de Passe (published in 1602, and as a book in 1607).

The relevant passage from Metamorphoses follows the first eighty-eight lines, which describe the creation of heaven and earth, water and air, animals and mankind, and reads in full (bk. 1, lines 89–112):

In the beginning was the Golden Age, when men of their own accord, without threat of punishment, without laws, maintained good faith and did what was right. There were no penalties to be afraid of, no bronze tablets were erected, carrying threats of legal action, no crowd of wrong-doers, anxious for mercy, trembled before the face of their judge: indeed, there were no judges, men lived securely without them. Never yet had any pine tree, cut down from its home on the mountains, been launched on ocean’s waves, to visit foreign lands: men knew only their own shores. Their cities were not yet surrounded by sheer moats, they had no straight brass trumpets, no coiling brass horns,
no helmets and no swords. The peoples of the world, untroubled by any fears, enjoyed a leisurely and peaceful existence, and had no use for soldiers. The earth itself, without compulsion, untouched by the hoe, unfurrowed by any share, produced all things spontaneously, and men were content with foods that grew without cultivation. They gathered arbute berries and mountain strawberries, wild cherries and blackberries that cling to thorny bramble bushes; or acorns, fallen from Jupiter’s spreading oak. It was a season of everlasting spring, when peaceful zephyrs, with their warm breath, caressed the flowers that sprang up without having been planted. In time the earth, though untilled, produced corn too, and fields that never lay fallow whitened with heavy ears of grain. Then there flowed rivers of milk and rivers of nectar, and golden honey dripped from the green holm-oak.12

Two drawings by Wtewael appear to represent initial and nearly final stages in his development of the composition. The earlier drawing, now in Munich (Figure 2), usually described as unfinished, is mainly concerned with a scheme for framing the view, with naked couples, gnarled tree trunks, and Cupid-like children sinuously bracketing the sides of the design, and in the center the entertaining motif of one boy helping another to mount an agreeable goat. The lovers at the right, the posturing pair farther back, the figure of Saturn overhead and, to a lesser extent, the goat...
and the triangular group of figures at the left are elements partly inspired by the engraving after Goltzius of the same subject, which dates from about 1588–89 (Figure 4).13

Wtewael’s second drawing, in Dresden (Figure 3), is quite dissimilar and very close in design to the painting. There are, however, reminiscences of the earlier sketch in the overall plan and in individual motifs. An infant holding fruit aloft again fills the lower right corner. The bearded man plucking grapes at the right takes the place of a passionate woman in the earlier drawing, who with her companions anticipates the grape-picking beauty and buttressing bodies beneath the arbor in the Dresden design. Below her, the woman reclining at the stone table and nuzzling a child, and perhaps also the pose of her male partner, seem to have developed from the female figure at the lower left in the Munich drawing. The climbing youth at the left in that composition and of course the boys with a goat have echoes in the later study (the youth in reverse). This occurs also in the disposition of masses and voids in the first design, where the pair of shadowy trees at the left and the washed-in ground plane show how Wtewael intended the left foreground to dominate. In the Dresden drawing this scheme is more extensively realized, with help from a dog and children drinking from a spring, the addition of the arbor and trees, and the pyramidal reconfiguration of the nude ensemble. An older man bearing fruit serves not only as a waiter but also as the formal equivalent of the boy mounting a goat. A similar kind of metamorphosis occurs in the middle ground, where the striding lovers in the Munich drawing anticipate the interwined trunks and feminine limbs of the trees in the Dresden study (which continue to attract the attentions of a male figure). Even Saturn on his cloud is given equal measure in foliage, which in the painting surrounds the sky-high figure of a man picking berries in the treetops.
In this complicated process of transformation, Wtewael appears to have crossed the threshold from one stylistic phase to another, or at least to have shifted his stance between the Mannerism of the preceding decades and the tentative Baroque tendencies of the early 1600s in Utrecht and Haarlem. Of course, the Dresden drawing and the Metropolitan’s painting remain rooted in the late sixteenth century; the preparatory work is to some extent a reflection of Goltzius’s design (to judge this properly requires looking at the print in a mirror, as Wtewael probably did, thus seeing what his famous predecessor had actually drawn). But there is a considerable gain in volumes and depth, consistent lighting and space, and the dramatic massing of figure groups in Wtewael’s second study compared with his first drawing and with his source in Goltzius. One measure of this is the surprising resemblance in composition between the left side of Wtewael’s drawing in Dresden and one of the great monuments of the Baroque age in the Netherlands, Rubens’s *Raising of the Cross*, of 1610–11, in Antwerp Cathedral.

Although some reservations concerning the authenticity of the Dresden drawing have been expressed in the past (it bears a false signature and the implausible date of 1595), there can be little doubt that it is indeed by Wtewael and is his preparatory study of about 1604–5 for *The Golden Age*. In the final work, a few motifs have been modified or newly introduced: two more young men pick fruit in and behind the tree at the left, and one of the youths at the upper left in the Dresden drawing has become an older man with a beard; the artist has added a parrot perched on a branch, the man at top center, a flying stork, and at the lower right a cat and a turkey; different figures animate the right background; the goat’s rider is finally mounted; and a second goat, which in the drawing is almost indistinguishable from the foliage at the upper right, is now more noticeable amid the twisting branches and dangling bunches of grapes.

In the painting, Wtewael departs from the Munich drawing not only in terms of design but also in his approach to the subject. The first composition, with three couples embracing and the other figures scrambling onto goats, trees, and clouds, suggests that the Golden Age was mostly an epoch of sex and exercise. The erotic element, which like the figure of Saturn went back to Goltzius, was toned down in the end, so that the subject is no longer a saturnalia but Ovid’s vision of men and women pursuing healthy, idyllic lives in harmony with nature and with each other.

For the most part, Wtewael based this interpretation on Ovid’s text, but he also must have admired his Utrecht colleague Abraham Bloemaert’s treatment of the theme in a masterly drawing of 1603 (Städelisches Kunstinstitut, Frankfurt), and the superb print after it (Figure 5), dated 1604, by the Antwerp engraver Nicolaes de Bruyn (1571–1656). In fact, Bloemaert’s composition, by far the most impressive version of the story by a Netherlandish artist up to that time, probably inspired Wtewael to turn to the subject in the first place. It has been noted that compared with earlier representations of the theme, “amorous activity is subdued” in Bloemaert’s rendering and naturalistic details are emphasized, as seen in the handling of the figures, the overflowing flora and fauna, and the description of the landscape itself (for which Bloemaert presumably chose De Bruyn, a specialist in the engraving of forest scenes).

Bloemaert’s own reference to the engraving after Goltzius is obvious when one compares his drawing to the print, so that the dominant group of figures and
trees is at the right in both compositions. The similarities include the motif of Saturn on a cloud, the inclusion of puffy-faced Zephyr (greatly diminished in the later work), and the use of two main allées into the background. However, Bloemaert also spared no effort to create an original work and to surpass the Haarlem master in ways that are more faithful to Ovid as well as to nature. The overall impression is distinctly Northern, in a tradition descending from Dürer’s Adam and Eve engraving of 1504 to Goltzius’s drawing of the same subject (engraved by Jan Saenredam in 1597) and to Roelant Savery’s Paradise pictures of forests teeming with animals. Unclassical figures, ancient trees, and abundant plants and animals are also found in a set of six prints after Bloemaert, The History of Adam and Eve, engraved and published in 1604 by Jan Saenredam. In the Temptation scene, where, of course, Adam and Eve take fruit from a tree, one corner of the foreground is filled with gourds and leafy branches, as in Bloemaert’s The Golden Age and Wtewael’s drawing in Dresden (Figures 3, 5), while the other corner is occupied by a cat and a turkey, the odd couple that replaced vegetation at the lower right in Wtewael’s painting.

Many of the figures in Wtewael’s small masterpiece are reminiscent of nudes found in earlier works by Goltzius and the Haarlem artists in his circle, by Bloemaert, and by Wtewael himself. However, there are no conspicuous instances of borrowing, which is not surprising considering that the Dutch Mannerists shared an extensive stock of motifs and placed a premium on constant invention. Within this single composition, certain poses are echoed, reversed, and modified, with a discriminating eye to silhouetting effects, rhythms over the surface, forms that counterbalance each other, and so on. The use of color is also remarkable, with flesh tones ranging from ivory to terracotta set against intense blues and greens. The spatial effect of contrasting warm and cool tones together with darks and lights has been enhanced by the actual low relief of the paint surface and by the subtlest suggestions of smoothness, hardness, softness, moisture, and other sensations.

While Wtewael found inspiration in the work of his like-minded colleagues in the Netherlands, he was also aware of the larger cultural realm in which they lived, that of Rome, Florence, Fontainebleau, Prague, and other capitals of Late Renaissance painting and
grapes in their upraised hands (Goltzius drew one of them in 1591 during his stay in Rome). Finally, the female grape picker at the left is very similar in reverse to a figure in a large sketch by Bartholomeus Spranger (1546–1611), *Diana and Actaeon* (Figure 6), which is considered to date from the early 1590s. It was drawings by Spranger like this one that were brought to Haarlem in 1583 by Karel van Mander and that made a great impression on Goltzius and other artists. In this fertile era of invention, the resemblance between figures dating some twenty years apart in the oeuvres of Spranger and of Wtewael may be considered simply as a sign of the Dutch painter’s fluency in a stylistic language that spread from Florence and Rome to Prague, Vienna, and other court cities in Northern Europe, and then to Haarlem, Amsterdam, and Utrecht. The *Golden Age* is a quintessential cabinet picture in its extraordinary refinement of execution (much of which requires magnification to appreciate), its classical theme, its references to other works of art, and in its minute study of naturalistic details (see Figure 7), in particular the various shells—themselves collectors’ items—which suggest (unlike the trees) that the mythological paradise was located somewhere in the East Indian Ocean. A parallel may be found in the Metropolitan’s large panel by Rubens and Jan Brueghel the Elder, *The Feast of Achemolus* (Figure 8), which dates from about 1614–15. It too illustrates a story told by Ovid, recalls classical sculpture in a few of the nude figures, and describes with delightful delicacy an ancient landscape, with birds, shells, fruits, and other bounty.

There is no counterpart in Wtewael’s painting to Jan Brueghel’s description of exquisitely manufactured objects, such as silver-gilt tazzas and ewers, since these treasures and the heroes’ weapons date from

**Figure 6.** Bartholomeus Spranger (Flemish, 1546–1611). *Diana and Actaeon*, ca. 1590–95. Pen and brown ink, brush and brown and gray wash, and white heightening over traces of black chalk, on paper washed blue and pink, 41.3 x 32.1 cm. The Metropolitan Museum of Art, Purchase, Lila Acheson Wallace Gift, 1997 (1997.93).

**Figure 7.** Detail of Figure 1.
later times—Ovid’s declining ages of silver, bronze, and iron. However, there does seem to be an allusion to the days of creation just prior to the Golden Age, so that when man arrived each region already had its “appropriate inhabitants,” water affording “a home to gleaming fishes” (two men use a net to catch them in the right background), while “earth harboured wild beasts, and the yielding air welcomed the birds.” Wtewael may even have had in mind Ovid’s notion that “whereas other animals hang their heads and look at the ground,” the Creator, “or else Prometheus . . . made man stand erect, bidding him look up to heaven,” no doubt sensing that he had been fashioned “into the image of the all-governing gods.”

Until 1988, when The Golden Age appeared at auction in France, no painting by Wtewael of this subject was known. There are, however, three references to such a picture, or to more than one, in early inventories. “Een tafel auf cupfer, Aurum seculum von Wtewael” (“a panel on copper, the Golden Age by Wtewael”) is cited in the 1619 inventory of the imperial Kunstkammer in Vienna. The inventory was made after the death of Emperor Matthias (1557–1619), who was the younger brother and heir of Rudolf II (1552–1612). The nature of the inventory has been debated, but it appears that the most Rudolfine works listed in it—meaning the most Mannerist, refined, learned, or erotic—came from the imperial collection in Prague. Matthias was a minor patron by comparison, with quite different tastes.

A painting of the same subject by Wtewael is also cited in an Amsterdam auction of June 27, 1752 (“No. 155. Een de gulde Eeuw, van Joghem Ustewael,” with no dimensions or other details), and in an Amsterdam auction of April 15, 1778. It is very probable that the same picture appeared in both sales, considering that they were held in the same city about one generation apart. At the second sale the painting is said to be on copper, “hoog 6 duim, br. 8 duim,” or about fifteen by twenty centimeters. Assuming that this information (to say nothing of the attribution) is reliable, the painting sold in Amsterdam in 1778 was not the present picture, but a work less than half its size. However, the proportions are the same, about three to four in a landscape format. Since Wtewael is known for repeating compositions in different sizes, it is possible that The Golden Age sold in Amsterdam was a replica of the New York picture.

Circumstantial evidence indicates that The Golden Age by Wtewael in the Habsburg imperial collection was painted between about 1604 and Rudolf II’s death in 1612. It was suggested above that Bloemaert’s drawing dated 1603 and De Bruyn’s engraving after it (Figure 5) inspired Wtewael to treat the subject as an independent work of art (nearly all earlier Netherlandish examples are related to a series of prints). Another indication that the emperor’s painting on copper, “Aurum seculum von Wtewael,” was not painted before about 1604 is found in the fact that no such work is mentioned by Van Mander in his book of that year. In the section of the Schilder-boeck titled “The Lives of Famous Netherlandish and High German Painters,” Van Mander rarely misses an opportunity to note when a picture by one of his compatriots could be found in the possession of a great prince or of any important collector. His biography of Wtewael mentions individual
paintings by him in private hands, including a small copper Mars and Venus “recently delivered to St. Joan van Weely.” This fresh information and details of Wtewael’s early career were evidently obtained directly from the artist. Therefore, it seems very likely that a painting by Wtewael that had been acquired by Rudolf II before about 1603–4 (and which treats a theme that Van Mander examines elsewhere) would have been mentioned by him in his comparatively detailed discussion of the artist. In the foreword of the Schilder-boeck, Van Mander calls Rudolf II the greatest connoisseur of painting in the world, and in the various “Lives” specific works by Spranger, Goltzius, Bloemaert, Jacques de Gheyn II, and other living masters are mentioned as in the emperor’s collection.

In every respect, The Golden Age seems the perfect Rudolfine image, given the emperor’s love of erotic mythologies, forest scenes, naturalia, and precious works of art. It is also probable that Rudolf II would have recognized in his own reign “The Golden Age Restor’d,” to quote the title of Ben Jonson’s masque of 1615 celebrating the Stuart era in England. Another example one could cite is Giuseppe Arcimboldo’s symbolic portrait of about 1591, Rudolf II as Vertumnus (Skokloster Castle, Sweden), which combines a year’s cycle of fruits and vegetables to depict the emperor as god of the seasons, suggesting that “the eternal spring of the new Golden Age is to come with his rule.” Wtewael would have been familiar with the political analogy, since Ovid’s description of the Golden Age was presented as a metaphor for beneficent rulership in Van Mander’s “Interpretation and Explanation of the Symbolism in Ovid’s Metamorphoses,” the section of the Schilder-boeck that immediately follows the “Lives.”

That a painting by Wtewael could be found in Rudolf II’s collection not long after it was made is not a cause for wonder. In addition to employing Netherlandish artists such as Savery in Prague, the emperor pursued works by recent and contemporary painters through diplomatic and other channels. In August 1595, for example, the imperial secretary wrote to Count Simon VI zur Lippe (1554–1613), Rudolf’s new ambassador to East Friesland, that he should try to acquire whatever “beautiful and artful” paintings he could, in particular in Amsterdam and Utrecht. The Protestant count, called Graef van der Lip by Van Mander, became a prominent figure in the Dutch art market, buying or attempting to buy important works by masters ranging from Lucas van Leyden to Goltzius and Bloemaert. Lippe solicited the help of artists, collectors, merchants, city officials, court figures, and even the prince of Orange to obtain paintings that were especially desired by Rudolf II or suited to his taste. Like other diplomats, Lippe, whenever he traveled to Bohemia (in 1601, 1603, and 1607), would bring pictures for his sovereign. However, there were many ways in which the count, whose seat was Schloss Brake (now the Weserrenaissance-Museum) in Lemgo, Westphalia, could have sent works of art to Prague.

One of Lippe’s main agents in Holland was the Haarlem engraver Jan Muller (1571–1628), who worked closely with Goltzius, made prints after Bloemaert as well as the Haarlem Mannerists, and maintained contacts with Spranger, Adriaen de Vries, and other artists at Rudolf II’s court. Paintings by Wtewael would have come to Lippe’s attention in a variety of ways. At least two of the collections in which works by the artist could be found (as noted by Van Mander) were known to the count as possible or actual sources of acquisitions. In 1602, his fortifications engineer, Johan van Rijswijck of Middelburg, advised him about important paintings that might be obtained from the mintmaster, collector, and gentleman dealer Melchior Wyntgis. And Lippe purchased four major pictures from the estate of the Amsterdam collector Jan Nicquet (1539–1608), who (as noted above) was said by Van Mander to own many small works by Wtewael.

As of 1605, the date inscribed on The Golden Age, Lippe also had at least one art agent in Utrecht, Andries van der Meulen (1549–1611). He and his brother, Daniel (d. 1600), came from a wealthy family of textile merchants in Antwerp, but as Calvinists they fled to Bremen in 1585. Both men were well connected politically; in 1584, Daniel served as Antwerp’s representative to the States General in The Hague. In May 1596, Lippe wrote to Andries van der Meulen in Bremen asking for his help in obtaining Dutch and Flemish paintings on behalf of Rudolf II, and eleven days later Van der Meulen wrote to his brother, who had moved to Leiden, with the same request. Lippe must have been in frequent contact with the Van der Meulens, since they were also an important source of political news. In 1605, Andries moved to Utrecht. He must have known in advance about the city’s leading artists, from the emperor himself, from Lippe, or from his own brother Daniel, a “very courtly and cultured man” according to Wtewael’s friend Van Buchell, in a diary entry of 1591.

Further speculation would be inappropriate, since the first owner of The Golden Age may have learned of its availability as fortuitously as the present writer did. In 1988, the picture surfaced for the first time at an auction in Versailles and moved swiftly through the London art market to the prominent collector Jaime Ortiz Patiño. After five years, Ortiz Patiño quietly consigned the work for sale to an art dealer in New York.
The painting was brought to our attention by a friendly journalist, who was aware that the Metropolitan Museum was one of the last great public collections without a work by Wtewael. Within weeks, a treasure that had disappeared for nearly four hundred years was on our walls.

ABBREVIATIONS

Bolten 1984

Fusenig 2002

Lowenthal 1986

Lowenthal 1997


Van Mander, Het schilder-boeck, 1604
Karel van Mander. Het schilder-boeck... Haarlem, 1604.

Roethlisberger 1993


2. Lowenthal 1986, p. 32.

3. Ninety-eight authentic works and nine "problematical attributions" are catalogued in Lowenthal 1986. A number of previously unknown pictures have appeared in the past twenty years, including the one discussed here.


10. See Bok in Spicer, Masters of Light, pp. 326–27, where (in n, 12) Lowenthal 1986, p. 31, is wrongly corrected.


13. The connection with the engraving after Goltzius is noted in Bolten 1984, p. 39 (pp. 33–37 on Goltzius’s illustrations to Ovid), and Lowenthal 1997, p. 51.

14. Goltzius’s original drawing is lost, but a copy of it, perhaps by the young Jan Muller (1571–1628), is in the Victoria and Albert Museum, London (E. K. J. Reznick, Die Zeichnungen von Hendrick Goltzius [Utrecht, 1961], p. 474, no. ZW 10, fig. 454).
15. It is doubtful that Rubens ever saw the drawing or Vetwael’s painting, although it could have made its way to Prague through Antwerp or Brussels (where Rudolf II’s brother Archduke Albert of Austria was regent of the Spanish Netherlands).

16. Lowenthal (1997, p. 51) concludes that the Dresden drawing “seems to be a well-developed preparatory study” for the painting in New York, and a comparison is made with a preparatory drawing in Oslo for Vetwael’s painting, *The Judgment of Paris*, dated 1602, in the Cleveland Museum of Art. See Lowenthal 1986, pls. 32, 34, for the Oslo drawing and the Cleveland painting, and pls. 5, 6, for the drawing in Berlin that was made in preparation for Vetwael’s *Wedding of Peleus and Thetis* of the 1590s or about 1600 (Alte Pinakothek, Bayerische Staatsgemäldesammlungen, Munich). See also Lowenthal 1997, p. 52 n. 13, on a copy after the Dresden drawing, in Düsseldorf. The authenticity of the Dresden drawing was convincingly defended before the corresponding picture was discovered, in Christian Dittrich, with Veronika Birke, *Die Albertina und das Dresdner Kupferstich-Kabinett: Meisterzeichnungen aus zwei alten Sammlungen*, exh. cat., Staatliche Graphische Sammlung Albertina, Vienna, and Kupferstich-Kabinett, Staatliche Kunstsammlungen, Dresden (Dresden, 1978), no. 82 (entry by Christian Dittrich).

17. The quote is from Roethlisberger 1993, vol. 1, p. 116, under no. 70 (catalogue entry for the engraving), where this point about De Bruyn is also made. The author convincingly overrules the suggestion made in Bolten 1984, p. 38, that Bloemaert’s drawing may not have been made expressly to be engraved, which is contradicted by the inclusion of the cartouche with putti in the drawing, and by all the evidence of the artist’s career as a designer and the art market in the Netherlands at the time.

18. As noted in Bolten 1984, pp. 37–38, where too much is made of the fact that the engraving after Bloemaert bears the same anonymous lines of Latin verse as the print after Goltzius. Such borrowings were common among print publishers.

19. Spicer (in *Masters of Light*, p. 334) says of Savery’s Paradise paintings that “these fantasies can best be thought of as avian equivalents of Vetwael’s Golden Age,” and reminds the reader (without knowing that the emperor may have owned the present picture) of Rudolf II’s famous menageries. For Goltzius’s drawing of Adam and Eve, with a goat, cat, and dog in the foreground, see Reznicek, *Die Zeichnungen von Hendrick Goltzius*, pp. 238–39, no. 10, fig. 288.


21. That Vetwael referred to Bloemaert’s *History of Adam and Eve* is also suggested by the strong resemblance between the couple in the background in the Munich drawing (Figure 2) and Adam and Eve in *The Tree of Knowledge*, the second print in the series.

22. The three reclining figures in the foreground of *The Golden Age* have immediate antecedents in Vetwael’s *Wedding of Peleus and Thetis* (Herzog Anton Ulrich-Museum, Brunswick) and his *Judgment of Paris* (Cleveland Museum of Art), both of 1602 (Lowenthal 1986, figs. 31, 32). The Brunswick painting also features children riding goats and a man pouring wine (in the lower right corner) who is very similar in reverse to the figure at the upper left in the Dresden drawing (Figure 3). The Cleveland picture includes a crouching dog as well as reclining male figures that look forward to *The Golden Age*. The scated woman at the lower right recalls a repoussoir figure in Jan Saenredam’s engraving after Goltzius, *The Discovery of Callisto’s Pregnancy*, dated 1599 (see Sluijter, *Solitude of Sight*, fig. 51, and the detail of this figure on p. 22), and another in Cornelis Cornelisz van Haarlem’s drawing of about 1588, *Olympic Games* (Pieter J. J. van Thiel, *Cornelis Cornelisz van Haarlem, 1562–1588: A Monograph and Catalogue Raisonne* [Doornspijk, 1999], fig. 29), while the reclining woman in the left foreground of Vetwael’s painting is similar to the woman on the left in Cornelisz van Haarlem’s panel of about 1597, *Depravity of Mankind before the Flood* (location unknown; Van Thiel, *Cornelis Cornelisz van Haarlem*, fig. 135). These comparisons do not reveal sources but parallels, of which there are many others.

23. A good sense of this can be gained from reviewing Sluijter, *De heynersche fabulsen*, figs. 3–30.

24. Lowenthal 1997, p. 50, offers a fine description of these effects, and makes the point about the relieflike application of paint.


27. See Frits Scholten et al., *Willem van Tetrode, Sculptor (c. 1525–1580): Guglielmo Flaminio scultore*, exh. cat., Rijksmuseum, Amsterdam, and The Frick Collection, New York (Amsterdam and New York, 2003), p. 119, no. 14 (the version in the Museum für Kunst und Gewerbe, Hamburg), where the bronze statuette of 1562–65 is called “a free variation on a familiar Florentine theme,” in which Van Tetrode was “preceded by major artists such as Michelangelo, Sansovino and Giambologna.” The latter’s *Bacchus* is illustrated in the same catalogue, p. 32, fig. 28.

28. See Reznicek, *Die Zeichnungen von Hendrick Goltzius*, nos. 245, 246, figs. 182, 183, after the Satyr in the Villa Albani, which is seen in a later state in Margarette Bieber, *The Sculpture of the Hel lenistic Age* (New York, 1961), fig. 358 (see also fig. 575 for another marble sculpture of a satyr holding grapes over his head, in the Vatican Museum). Carlos A. Picón, Curator in Charge of the Metropolitan Museum’s Department of Greek and Roman Art, kindly brought this category of works to my attention. He also mentioned the numerous examples of children with goats in Greek sculpture, but it does not appear that Vetwael had a specific example in mind.


30. For example, the cat, viewed under a microscope, is shown to be rendered in countless threadlike lines of paint, many of which are red, thus lending warmth to the gray tabby coat of fur.


33. The quotes are from *The Metamorphoses of Ovid* (p. 31), in the two paragraphs immediately preceding the description of the
Golden Age. Renaissance and Baroque artists would have approved of this passage because it supports the familiar argument in "paragone" debates that the most superior sense is that of sight. Thomas Aquinas wrote that human beings walk upright because their senses seek out knowledge and beauty, not just mere necessities. Animals face the ground, but man stands erect, "in order that by the senses, and chiefly by sight, which is more subtle and penetrates further into the differences of things, he may freely survey the sensible objects around him, both heavenly and earthly, so as to gather intelligible truth from all things" (David Summers, The Judgment of Sense: Renaissance Naturalism and the Rise of Aesthetics [Cambridge, 1987], p. 36, for this translation of a passage in the Summa Theologica).  

The document is listed in Lowenthal 1986, p. 212.

This opinion was expressed by Thomas DaCosta Kaufmann, in a personal communication to the present writer, dated June 29, 2004. See Thomas DaCosta Kaufmann, Art and Architecture in Central Europe, 1550–1620: An Annotated Bibliography (Marburg, 2003), pp. 24–31, for a list of primary sources and studies of the various inventories of the imperial collections in Prague and Vienna, and pp. 90–95, for a list of publications on patronage and collecting in Rudolfin Prague.


Lowenthal 1986, p. 212.

Here the writer draws a different conclusion than that implied in Lowenthal 1997, p. 50, where the Amsterdam painting is described as "slightly smaller than the Metropolitan Museum’s example." With a surface area equal to 97.7 percent of the larger one, the smaller picture could be laid down twice on the New York painting, leaving an inch to spare across the top or bottom.

For example, the two versions of Wtewael’s Battle between the Gods and the Titans, of about 1600–1605 (Lowenthal 1986, nos. A-23, A-24, pls. 35, 36), are on coppers 21 x 28 cm (private collection) and 15.6 x 20.3 cm (Art Institute of Chicago), or about the same sizes as the two paintings under discussion. See also Lowenthal 1986, pls. 8–10, 32, 33, 37, 38, with dimensions given in the captions.


Van Mander, Het schilder-boek, 1604, fol. 4v; see also Lowenthal 1986, p. 24.

See Kaufmann, School of Prague, pp. 59–63, on “Rudolfin Mythological Painting: Poesie in Prague,” and pp. 74–89, on “Nature Studies: Landscape, Still Life, and Animal Painting in Prague.”


Kaufmann, School of Prague, p. 171, and under no. 2.22. Patronage on this princely level might help to explain why Wtewael turned to the theme of the Golden Age, which “was relatively uncommon then, in comparison with feats and amorous exploits of the gods” (Lowenthal 1997, p. 51). However, this remark must have been made specifically with Dutch paintings in mind; the earlier prints illustrating Ovid’s passage may be counted among those supporting Sluijter’s observation (in Sluijter, De “byenhose fabulen,” p. 23) that Dutch artists first demonstrated an interest in mythological subjects by treating “countless scenes that were never [or very rarely] represented in painting.” Some sixteenth-century Italian painters who depicted the Golden Age are reviewed in Bolton 1984, pp. 26–27, Jacopo Zocchi’s The Golden Age, one of three panels representing The Ages of the World (Uffizi, Florence), has been interpreted as a political allegory celebrating justice under Medici rule; see Bolton 1984, p. 27, figs. 6–8, citing Edmund Pillsbury, “Drawings by Jacopo Zocchi.” Master Drawings 12 (1974), pp. 12–13, pl. 8, and Thomas Puttfarken, “Golden Age and Justice in Sixteenth-Century Florentine Political Thought and Imagery: Observations on Three Pictures by Jacopo Zocchi,” Journal of the Warburg and Courtauld Institutes 43 (1980), pp. 130–49.

Van Mander, Schilder-boek, 1604, sect. 5, fol. 3v. A useful summary of the six sections of the Schilder-boek is offered by E. K. J. Reznick in his entry on Karel van Mander I in Dictionary of Art, vol. 20, pp. 245–46, where we are reminded that Goltzius worked on his illustrations to the Metamorphoses in close collaboration with Van Mander. Lowenthal 1997, pp. 51–52, connects Wtewael’s picture with Van Mander’s interpretation of the Golden Age, and observes that “such sentiments are more likely to represent the views of a patron than of Wtewael, in view of his later pro-Orange sympathies.” Here, the author has in mind the possible “paciﬁst implications” of the subject, which assumes that the enlightened ruler in question would have been Dutch.


See Van Mander, Lives, 1604 (1994–99 ed.), vol. 4, pp. 38 (Wytgits) and 192 (Nicquet), and note 1 above. On the Middelburg collector and Lippe’s contact there, see also Fusenig 2002, p. 120.

For the details in this paragraph, see Fusenig 2002, pp. 112–15.
Despite its great popularity among eighteenth-century patrons, and the jealousy it aroused among members of the Académie Royale de Peinture et de Sculpture because of the success of its practitioners, the medium of pastel was fraught with challenges. Among them were the constantly falling dust, the difficulty in making corrections, the obstacles to layering color and the impossibility of using glazes, the necessity of working with many hundreds of crayons rather than the oil painter’s manageable palette of nine or ten basic pigments,¹ and chronically dirty hands. These proclaimed shortcomings all stemmed from the powdery structure of the medium—the essential characteristic that gave pastel its distinctive optical properties, namely, its velvety texture and the perpetual freshness of its non-yellowing colors. Widely appreciated, such enticing visual qualities only enhanced the ready adaptability of the crayons in conveying a sense of spontaneity and draftsmanly dash, much admired in an era that increasingly valued signs of the brush, the chisel, and the première pensée of the drawing. Far outweighing the medium’s drawbacks, these features largely accounted for the enormous craze for portraits in pastel. Indeed, the 2,500 artists and amateurs who were purported to work in it in midcentury Paris² surely provoked the Salon critic Étienne La Font de Saint-Yenne to remark in 1747: “Pastel has become excessively fashionable—La Tour has a crowd of miserable imitators—everyone has a colored crayon in his hand.”³

Maurice Quentin de La Tour (1704–1788) and Jean Baptiste Perronneau (1715–1783) are outstanding exemplars of the ingenuity called for in manipulating this medium—simple sticks of color composed of pulverized pigment and white filler loosely bound with a gum. The two portraits recently acquired by the Metropolitan Museum—Jean Charles Garnier d’Isle (1697–1755; MMA 2002.439) by La Tour and Olivier Fournier (1724–1764; MMA 2003.26), also known as L’homme aux trois roses, by Perronneau—represent brilliant moments in the oeuvre of each artist (Figures 1, 2, Colorplates 8, 9). Executed six years apart, at midcentury, each work attests to the artists’ technical mastery both in capturing the psychology and expression of the sitters and in producing effects suited to the prevailing taste for naturalism. This essay will discuss these works in the context of eighteenth-century pastel practices and aesthetics. By examining the different layers and components of these portraits, it will demonstrate how they were constructed, how each artist dealt with the unusual technical demands of the medium, and the methods each used to express his individual style.

Preparation of the Support

As Claude Henri Watelet explained in his L’art de peindre, compositions in pastel, despite their dustlike nature, were regarded as a form of painting. This was the model that pastelists sought to emulate, both in the appearance and in the physical format of their art.⁴ The customary foundation for these works, as our two portraits exemplify, was a wood strainer comparable to the rigid framework with fixed corners then used for oils.⁵ Onto this, lightweight linen was stretched and tacked; paper was pasted to the fabric, and the margins of the paper were wrapped around and glued to the back of the structure. Much like a canvas prepared for painting, this assembly provided a resilient surface on which to work at an easel and an efficient means of fitting the object into a frame with glass.

Perronneau followed this conventional procedure for his composition, but La Tour—the prosperous Peintre du Roi—did not and instead used a rather curious structure and mounting method for the portrait of this sitter, one of the many prestigious citizens and
aristocrats who figured among his clients. In a departure from La Tour’s characteristic attention to perfection, the eccentric strainer for Garnier d’Île retains tree bark on the interior face of each vertical bar, as opposed to the planed edges customarily used for pastels. No other such examples have come to light, suggesting that while negligent in the lack of finish, these rounded surfaces were meant to prevent damaging pressure marks being transferred to the pastel surface. Additionally, La Tour’s paper was not large enough to be fully secured around the linen-covered strainer. Rather than adding strips of paper to extend his working surface—a practice that he, as well as many other pastelists, often employed—La Tour took a seemingly frugal approach to this vital phase of preparation. Compensating for the disparity in dimensions, he simply adjusted the position of the sheet, wrapping only three of its four edges around the strainer and leaving a narrow band of exposed linen at the top, which was hidden from sight when the work was framed. The paper on which a portrait in pastel was rendered, and the treatment of that support, were critical to the final effect. Thus, as is apparent in our examples, it was at this early stage of the working process that the character of the composition was established. The papers favored for dry color were generally robust sheets, types that would be referred to in the nineteenth century as “wrappers.” Unlike costly writing papers, which had relatively hard surfaces neces-
sary to withstand the action of pen and ink, these stout papers were thick and only lightly sized, characteristics that allowed them to be manipulated in such a way as to make the surface more receptive to holding this powdery medium. Preparation of the sheet—before or after attachment to the stretched linen—might entail one or several operations: immersing the paper in boiling water to remove the sizing; leveling the sheet with a penknife to eliminate fibrous clusters; rubbing up the surface with a cuttlebone; coating the paper with fish glue and wine mixed with fine pumice dust, as Jean Étienne Liotard described was sometimes his method; or applying a thick and irregular distemper coating, as was practiced by Élisabeth Louise Vigée Le Brun. The primary purpose of these processes, which produced a nap or “tooth,” was to provide a mechanical bond for the pastel, necessary because the medium did not contain sufficient binder to serve as an adhesive. The resulting texture, whether heavily or lightly modified, would have a bearing on the distribution of the pastel powder and the appearance of the composition. Rather than a uniformly smooth surface being the ideal, knots, creases, and minor defects—seen in the Metropolitan’s two pastels—were held to confer artistic force, as declared some years later in the authoritative Traité de la peinture au pastel.

While serving as a means to secure the powder, the preparatory operation also helped to obliterate the disturbing laid and chain lines that were inherent to
all handmade papers—the only papers available in the eighteenth century. Most pastellists were intent on eliminating any irregularities in the support corresponding to the face of the sitter so that the final work would have a painterly, modulated appearance, unmarred by the uneven grain of the sheet. This, however, varied with the artist. For example, in a pastel by Rosalba Carriera, Portrait of Gustavus Hamilton, Second Viscount Boyne, in Masked costume (1730–31, MMA 2002.22), the mold lines underlying the sitter’s face have been smoothed away, but not those in the background. In the La Tour the paper has been rubbed overall, softening the surface and raising the fibers, making its original structure indiscernible. In raking light, the expanse of projecting, shadow-casting fibers and the thick layer of deeply embedded pastel are clearly evident in the face, the area of the composition most subject to revision; in the background the surface is consistently smooth (Figure 3). By comparison, Perronneau appears to have prepared his support selectively. In Olivier Jouann, laid and chain lines are visible in several areas in the face and attire of the sitter (Figure 4), whereas in the background the paper is moderately napped, and the stumped pastel is irregularly impressed into it. In this composition the unmodified hard surface of the paper beneath the face contributes to the optical brightness of the skin tones, as they are not compromised by projecting fibers (or the dust attracted to them), and the pastel, sitting higher on the surface of the support, is more texturally varied than in the La Tour.

In addition to having less refined tactile properties than writing or printing papers, those used for pastel, made with lower-grade furnishes, were available in a limited range of colors. Blue papers were made from rags dyed with indigo, and the neutral-toned gray, buff, and “whited-brown” papers were produced from a random blend of mixed fibers. Recommended by all treatises, these colors were well suited to pastel, because, as middle tints, they facilitated building the shadows and highlights, much as a dark-grounded canvas would for oil painting. Yet, even though the colored sheet served as a working tool, or a tonal midpoint, in the end the evidence of its hue would be largely obscured by the opacity of the pastel layer.

For his portraits La Tour generally chose a medium blue paper, which in Garnier d’Isle can be detected in the well-preserved color of the tacking edges. This color seems to have been the preference of many pastellists and often appears in their self-portraits, in which such papers are shown mounted and propped on an easel. However, despite his frequent use of it, La Tour found this color unsatisfactory. In correspondence years later with his friend and former student
Belle de Zuylen, he complained about “the incessant blue hue that pervaded the tone of everything” he did. In this letter he described his recently devised method of brushing the surface with a thin wash of yellow ochre in water mixed with a little egg yolk. This probably helped to chromatically neutralize the color of the paper, but, as he explained, it eliminated the need for the thick layer of heavy pastel that otherwise would be required to obscure the underlying blue support.¹⁴

It is interesting to speculate if the faint gray tide lines along the tacking edges of this support are evidence of some type of thin brush coating La Tour was using at this earlier period for this purpose. They are unlikely to be the boundary of a fixative, because he characteristically applied this substance only to the head of the sitter—not to the entire surface of the sheet—and he used it as an intermediary, not a preliminary, layer. Commencing with a wash, as he stated, would have allowed him to suppress the color of the paper with a minimum amount of pastel and also would have helped to secure the subsequent layer of evenly distributed powder. The flat background, as seen in the Metropolitan’s La Tour, achieved by rubbing the pastel into the support with a roll of leather, or stump,¹⁵ not only contrasts with the more varied relief of the strokes of the sitter, but the diminished light reflections from its planar surface further enhance the composition’s textural differences. Indeed, the artist’s methods are suggested in Garnier d’Isle by the uniform expanse of bluish black pastel that fills all the interstices of the paper and appears dense and compact, yet, as close examination reveals, was not heavily applied.

While for La Tour the support—its texture and color negated—functioned merely as a carrier to provide a secure foundation for the powder, for Perronneau—whose technique was far less labored—it served a more varied role. In Olivier Jouven the artist used an off-white paper and showed less concern in entirely obscuring its presence. As described, he did not rub up the sheet beneath the sitter’s face, hence the irregular surface of laid and chain lines caused discrete passages of pastel powder to be deposited on the crests of the paper grain but not in the hollows. The resultant small voids, around the mouth and in

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Figure 5. Infrared reflectogram of detail of Figure 2, showing underdrawing in black chalk

Figure 6. Infrared reflectogram of Figure 1
the jacket at the lower right,16 along with the projections in the paper, serve as subtle points of luminosity. These elements, plus the somewhat quick, draftsmanship quality of his crayon, contribute a certain lack of finish to the composition and a sense of the spontaneous inspiration associated with these effects.

**The Underdrawing**

La Tour was unique among pastelists in his custom of making preparations. These small, independent, and yet highly finished head studies served in his relentless quest for fidelity to nature, his search for the sitter’s true ressemblance behind the exterior visage. In order to capture the immediacy and freshness of their subjects, however, pastelists generally did their preliminary drawings for portraits directly on the support. The seventeenth-century practitioner Robert Nanteuil, for example, worked exclusively in this manner, according to his protégé Domenico Tempesta, as he prized “the fire of the preliminary ébauche.”17 Perhaps for similar reasons, no preparatory portrait drawings by Perronneau are extant. There is, as a result, a dearth of pictorial and literary information regarding the materials and nature of pastel underdrawing, the most fundamental phase in developing a composition.

In seeking such physical evidence, two other problems arise. The first is that pastel, as any powdered substance, is inherently opaque, and thus it is almost impossible for preparatory strokes to remain visible to the unaided eye in a finished work. The second obstacle to uncovering underdrawings is that, presumably, many were rendered in white sketching chalks, such as a combination of whiting and tobacco-pipe clay, and flesh-toned pastels, such as tints of carmine and lake,18 hues that would harmonize and blend with the subsequent colors of the complexion, but which are transparent to infrared reflectography. It is perhaps for this reason that no evidence of an underdrawing using this means of examination was found beneath Garnier d’Isle; however, a very summary underdrawing, rendered in black chalk, was detected in the Perronneau portrait. Under infrared light, these marks can be discerned at the temples, beneath the hairline, on the left side of the chin, and in a leaf located to the right of the corsage (Figures 5, 6). The overall economy of this preparatory work appears typical of the few black chalk underdrawings that have come to light and may imply both that it was intentionally spare, because of the chromatic problems a dark powdery preliminary drawing posed, and that it was to be supplemented by flesh tones.19 In the context of Perronneau’s lightness of hand, and even his summary manner of preparing his support, this rudimentary sketch suggests that this itinerant artist, known to be less exacting than the obsessive La Tour, approached his subject with great immediacy and made few corrections in his conception in the course of his work. As will be discussed, this was at great variance with La Tour’s arduous process of elaboration in Garnier d’Isle.

**The Working Process: Color Application and the Pastel Palette**

There is also little information concerning how the pastelist progressed from this point, and thus the process must be clarified by documentary sources and by looking at unfinished work. For La Tour, as seen in the vigorous, graphic strokes of his préparation of Louis de Silvestre (J. Paul Getty Museum, Los Angeles), an early stage of drawing entailed organizing the lights and shadows, starting with the blue paper as the middle tone. Here, simple black chalk lines heightened with white chalk are combined to fix the structure of the face and to establish the basis for the modeling that in a later phase of work would appear as large blended masses. The image would then be further developed in colored crayons on another sheet.20 More typically, pastelists would have carried on from the underdrawing with dead color—tints in a limited range of flesh colors and darker tones of green, blue, and brown—rubbed into the paper to provide both a ground and a chromatic foundation. From this stage, highlights and shadows would be developed, applying hatched strokes in half tints and full color to build the large color masses, continually modulating, smoothing, and replenishing with more crayons. In order to maintain the breadth of the composition, all parts of it were worked on, more or less simultaneously.21 Apart from the reworking that was integral to La Tour’s process, this would have been the general sequence of color application employed by him and by Perronneau in these carefully wrought portraits.

Yet, more important than this sequence of steps was the manner in which crayons were used when executing a composition. The powdery nature of pastel did not lend itself to glazing or layering, nor could the colors be mixed on a palette or support, or applied by brush. To produce the naturalistic and illusionistic effects demanded for portraiture in the eighteenth century, as unequivocally prescribed by Roger de Piles in his Cours de peinture par principes,22 the pastelist had to be equipped with a vast array of colors in advance of work. Because of the numerous complications in their fabrication—preparing the pigments and coordinating the properties of each component to produce
crayons with desirable color and textural qualities—they were rarely made by the artist but rather purchased from pastel makers in cities throughout the Continent and in London. Typically, a collection of pastels consisted of numerous tints of each pigment and compound color (tints composed of two or more pigments, such as yellows and blues to form greens), each made with increasing proportions of a white filler (among them gypsum, talc, or tobacco-pipe clay) and a binder suited to the particular mixture. Having an expansive range of tints ensured the most subtle gradations, and adeptness of hand in modulating them ensured chromatic brilliance. It was precisely this necessity that La Tour bemoaned. To him “the tone was never correct, one was obliged to use several tints on paper and make several strokes with different crayons instead of one, as the painter did in oil, to avoid risking damage to the work.”

Despite the vast number of crayons the pastelist required, this was not, in theory, at great variance with the hues required for the oil painter. Jean Baptiste Oudry, in his second discourse on color at the Académie Royale in 1752, had advised that the painter’s palette be laid out with all the available pure pigments, and each was to have at least five premixed tints and as many midtones as the artist could manage (approaching an implausible one hundred and fifty hues) so as to avoid “tiring” them by mixing with the brush while working. Using oil painting as the model, the same warning not to impair the purity of the tones was conveyed by manuals for pastel, instructing the artist to guard against the practice of those painters who mix and compose their colors on the canvas and thus risk overworking them. Indeed, such connections between the two media seems even to have extended to the pastel box—the counterpart to the painter’s palette. Instructions for its organization recommended separate partitions for crayons of related hue, a plan that enabled the artist to see the full extent of his graduated tints laid out before him, much as one does on the oil palette, but for the pastelist it also served to eliminate searching for a much needed color.

With a rigorous verisimilitude being the norm, patrons demanded fidelity not only in rendering psychological individuality and gesture but also in the color and texture of all aspects of their appearance: their skin, eyes, hair, fabric of their attire, and accessories. The sitter was to be particularized and thereby recognized. To achieve this, without resorting to mixing colors, the pastelist had to apply the tints in imperceptible tonal steps and blend the strokes of adjacent hues either with the crayon or “sweeten” them with the finger or the stump. These skills, among the most important for those working in this medium, required only the slightest pressure so as not to flatten the powder. In contrast, textural accents, details, and small touches were rendered decisively with the edge of a broken crayon, and any excess removed with a pin. The goal, as explained in manuals whose audience consisted largely of amateurs, was to achieve a blended effect as in oils, as if the pastel had been rendered with a brush. La Tour, in a letter to a student, was at pains to point out the restraint this entailed, counseling her “to not overwork the colors when they are right, to use your little finger as lightly as possible, not to employ too much color and to keep the paper untouched wherever you wish to apply a heavy layer of chalk: the work will, in this way, be much more lightly done.” It was this traditional technique that formed the basis for the large, modulated expanses of color in both Metropolitan portraits: compact, dense, and homogeneous in La Tour; suggestive, light, and varied in Perronneau—each style manifested first in the artists’ respective choice of support and then in its preparation.

Verisimilitude, however, was achieved not only in the artful handling of the material but also by the skillful orchestration of color. La Tour’s sitter is rendered in convincing skin tones, and the broad passages of color are closely related and blended. The jacket has a harmonious silvery blue tonality echoed in the reflections in the face; the dark background, with its subtle hints of porphry, suggests a flat field of black stone. In contrast, Perronneau’s approach, like his treatment of the paper, is more spontaneous and diversified. His blending of the tints is imperceptible in many areas, yet he is also content to depart from conventional practice. His background is relatively light and varied and does not set up a strong contrast with the figure. In addition to the occasional small reveals of paper, his palette is more capricious in its unrelated colors: oppositions of blue green and pinkish red are seen throughout. A blue-green coloration permeates the whole. Moreover, the underlayer of the background, the chair back, the strokes and passages of the chin, the jacket, and the leaves and stem of the corsage, taken together, form an overall play of opposing colors, with each reflecting the other—a means of arraying color that parallels the short, broken strokes of Chardin’s pastels.

Despite their differences, however, for both artists the subtle, superimposed accents of unblended, firmly stroked color marked their finishing draftsmanly touches. These are apparent in the zigzag and hatched highlights—in Garnier d’Isle, notably in the forehead and sleeve; and in Olivier Jouvin, in the face, jacket, and background—touches that give these
works their particular vitality and signal an emerging taste for signs of the artist’s hand and a glimpse of the creative process.

**The Working Process: Fixatives**

Despite the richness of the palette and inherent brilliance of the light-scattering particles, the inherent flaw of pastel is that it is merely powder and does not form a continuous film. Its weak adhesive properties cannot be fully overcome by modifying the texture of the support, and at a certain point it is no longer possible to add more layers of color or to make corrections. Doing so would compress this dustlike material, thus altering the way in which light is reflected; the hues would be dulled, and the prized velvety quality, or “fleur,” impaired. For an artist confident in his first thoughts, this ruinous stage would probably not be reached, but for La Tour this was not the case. Plagued by the limitations of the medium—the only one in which he worked—he compared himself to “poets and musicians who can revert to the best of their first thoughts, when their corrections extinguish that inspirational fire which produces sublime effects. But in my pastels,” he continued, “all is lost when I yield to a mood different from that of the original inspiration: the unity is broken.” By contrast, “the painter in oils, by the use of alcohol and the bread rubber, may recover the first freshness of his conception.”

It was presumably at this point in his work that La Tour, constantly driven to revise his portraits in search of the most apt expression of his sitter, would apply a fixative to create a barrier—or a new ground—so that he might rework without any evidence of alteration. His *Self-Portrait* (Musée Antoine Lécuyer, Saint-Quentin), a *préparation*, bears witness to the process (Figure 7). Here fixative has darkened the pastel, apparent in the irregular aureole encircling the face. While this surrounding area was left exposed, the visage was amended with a fresh application of color.

In devising a method for overcoming the problems of this weakly bound powder, La Tour was very much in accord with the current concerns of the Académie Royale. Protecting pastels with a fixative—a liquid solution consisting of a transparent resin and alcohol, such as fish glue dissolved in water and spirits of wine—had become an important issue at midcentury, the moment when the Metropolitan’s two portraits were executed. Ambitious reforms beginning in 1747, spearheaded by Mme de Pompadour’s uncle, Charles François Lenormand de Tournehem, included creating both a collection of paintings for nationalistic purposes as well as a means of caring for them. Amassed from the royal holdings and the gifts of living artists, these works would ultimately form the foundation of the Louvre; preserving this patrimony implied that they be maintained in good condition. Because pastels were regarded as a form of painting, efforts were also directed toward their preservation, and thus interest emerged in developing an invisible elixir to protect their fragile surfaces. Records of the
Académie Royale, the Académie des Sciences in Paris and its counterpart in London, the Royal Society of Arts, and numerous artists’ manuals tell of the chemists, charlatans, and artists—including La Tour—who, in response to the promise of prizes and commendations, came forward with experiments and recipes for this purpose. These documents attest to the many debates arguing not only which fixative and which method of application was effective but whether any were as good as a sheet of glass.34

At the same time, it was also recognized that pastels treated with fixative would darken and lose their distinctive texture and matte effect, as may be seen in the background of La Tour’s Self-Portrait described above. However, devising a substance that would not provoke these consequences was, in fact, not possible. Once these irregular, dustlike specks are surrounded by a liquid, the diffuse light-scattering effect, which confers the medium’s characteristic velvety aura, is altered (Figure 8). A fixative penetrates the randomly arrayed particles, filling the spaces between them, repositioning them, compressing the surface, and thus saturating the color. Indeed, it was the absence of just such a coating, which invariably yellowed in time, that contributed to the freshness of color that characterizes works in pastel.

Both La Tour and Perronneau must have been fully aware of the deleterious effects of these materials, for neither artist used them to protect the surface of his work but, rather, for intermediary layers. In the case of La Tour, many of his préparations make this evident; however, his use of fixative in this manner also extended to his finished work, where its presence is largely hidden. In fact, numerous accounts testify to his propensity for reworking and often ruining his portraits. This avidity for perfection may be seen, for example, in his reception piece of 1746, Jean Restout (Musée du Louvre, Paris), which, by the artist’s own account, he revised and fixed at least one hundred times in the twenty-five years following its execution.35 The influential amateur Louis Petit de Bachaumont also wrote of this penchant for perfection, exclaiming that “La Tour does not know when to stop. He continually endeavors to improve upon what he has done with the result that by overworking, by tormenting his picture, he frequently spoils it. He then takes a dislike to it, erases it and begins again; and the second attempt is often inferior to the first. He has, moreover, an obstinate prejudice in favor of a particular kind of varnish which, so he believes, he invented himself and which frequently ruins his work.”35

Because a fixative can provide a receptive surface for a subsequent layer of pastel, indications of La Tour’s use of such a barrier to correct his presenta-

Figure 9. Detail of Figure 1. The underlying fixative layer is revealed by the dark blue spots at the upper right of the jacket. The passamererie was rendered by brush in gouache.
dence regarding this particular practice. Despite Enlightenment propensity to applaud scientific discovery and encourage its application to preserving delicate works of art, little information survives about the actual use of such substances by other artists. Few were willing to divulge their formulas and techniques because such secrets were believed to have a bearing on one’s success. While close examination of Olivier Journu suggests that Perronneau did not refrain from this practice, his reason for using a fixative in this composition differed from that of La Tour. La Tour’s purpose was to isolate parts of the composition with which he was dissatisfied so that he might make clean corrections with fresh strokes of the crayon. In Olivier Journu fixative is also used as a barrier, but it is limited to the background so that the color could be modified—in this case, revealing hints of blue to enrich the green (Colorplate 10). Though visible even with the unaided eye, under magnification many of the exposed blue sites appear both translucent, as if bound or covered by a medium, and as a distinct layer that is not intermixed with the green above it.\[38\]

Despite these differences in approach, fixatives served these artists as a means of avoiding the inevitable physical and optical muddying of hues resulting from the intermingling of colored powders. While their contemporaries, at least according to literary sources, regarded these substances as protective coatings, La Tour and Perronneau used them as integral elements in their working process. This technique would be exploited in the late nineteenth century by Edgar Degas in his pastels, enabling him to obtain the greatest clarity of tone in his arrangement of complementary colors.

**Final Details and Verisimilitude**

In accord with the demand for fidelity to nature, viewers took great pleasure in studying and interpreting every aspect of portraits such as these, reveling in their astonishing verisimilitude and technical brilliance. Certainly the most dramatic of the virtuoso effects were in the final details. La Tour’s much-admired genius in producing an illusion of reality is palpable in Garnier d’Isle, particularly in the eye-catching passementerie.\[39\]

Not only does the placement of the jacket closures emphasize the sitter’s corpulence, and his seeming intrusion into the spectator’s space, but La Tour has made the clasps tactile by painting them with a brush loaded with a thick liquid mixture of gray, white, and black gouache, producing an effect that virtually sparkles (Figure 9). He probably made the gouache by scraping his crayons to a powder, which he combined with a fixative or a gum. The resultant medium—with its high ratio of pigment to liquid—has optical properties similar to pastel, making it and dry color well suited for use together, as La Tour often demonstrated, notably in his elaborately detailed portrait of Président Gabriel Bernard de Rieux (J. Paul Getty Museum, Los Angeles).\[40\]

In Olivier Journu, Perronneau exercised comparable technical legerdemain in the lace jabot using dry, sharp-edged pastels directly applied without blending; the jagged impression within each stroke, when seen under magnification, indicates that rather than being smoothly worn the crayons were intentionally broken. In contrast to his bold handling of the face, corsage, and red jacket, the process used to construct the jabot—a motif he frequently employed—is invisible. Seeming to project beyond the picture plane, the convincing naturalism of the jabot is produced by precise and harmonious strokes of whites, light-hued mauves and grays, and foreshortening to near life-size dimensions (Figure 10). In its structure and placement of tints, the jabot suggests an awareness of Oudry’s two lectures on color, and, perhaps, of his celebrated monochromatic trompe l’œil painting, The White Duck (1753, whereabouts unknown), a pedagogical demonstration of illusionism and the relativity of whiteness—of its tones, and of the quality of its lights and shadows.\[41\]

But surely Perronneau’s most startling attempt at a technical coup is the sprinkling of powder on Journu’s shoulders from his freshly coiffed wig (Figure 11). This is a motif the artist employed frequently for his male sitters, albeit usually in greater abundance than portrayed here, since it signified a certain material comfort that was readily comprehended by his haute bourgeoisie clientele.\[42\] One of the most notable examples of this is Perronneau’s portrait of La Tour in his black velvet surcoat (Musée Antoine Lécuyer, Saint-Quentin) (Figure 12), displayed in the Salon of 1750—the famed pastel that provoked the notorious, though much exaggerated, rivalry between the artists. While Perronneau was more than capable of rendering this detail with his crayons, scientific analysis reveals that this white powder is not pastel at all but, rather, spherical clusters of wheat flour (Figure 13).\[43\] That there are relatively few of these clusters makes it appear this was an experiment that stopped short; nonetheless, it was an attempt, at this final stage of the composition, to appeal not only to the taste for novelty and detail but also to the prevailing sensibility that demanded art imitate life. By employing the very substance customarily used to powder a gentleman’s perruque, Perronneau captured and deepened a much-desired illusion of reality.
Eventually, Perronneau came to be criticized for not being true to nature.\textsuperscript{44} The eighteenth-century viewer expected a painting to be immediately comprehensible,\textsuperscript{45} and the fragmented coloring of the artist's flesh tones, and lack of solidity in his stroke and surfaces, as seen in \textit{Olivier Journu}, would be faulted for their ostensible lack of verisimilitude. Moreover, the public not only wanted the perfect illusion but it wanted to view its illusion from a prescribed distance. The concept of how one was to look at a picture was first elucidated by de Piles; he asserted that "every painting has an ideal viewing distance and its beauty will be compromised as one moves near or far away."\textsuperscript{46} This opinion had only grown stronger by midcentury, as the increasing focus on issues of naturalism placed a corresponding emphasis on display practices. Thus it was established that "works of art were to be placed,
lighted and beheld at a suitable distance in order that the illusion be successful.” 47 It is not surprising, then, that Salon criticism, which reflected the taste of both the public and the connoisseur, would find Perronneau lacking. In 1748 one voice, Saint-Yves, referring to this artist in particular, remarked that “at a distance the imitation of nature diminishes in his work; parts which have the most need of strong touches are lost at a certain remove and are no longer united in the eye of the spectator. Viewing them from near and then from five feet away will make this evident.” 48

Similar criticism, which clearly implied that the artist paint with an awareness of where his work would hang, was also directed at La Tour. 49 Filled with pride, La Tour expressed his indignation at the demand to view works from “at least twenty-five feet away; when in fact, the focal point is close,” a requirement particularly frustrating to the portraitist who worked only two or three feet from the model. Seeking to “discern from near what cannot be seen from afar,” was a “disturbing conflict” he asserted to the Marquis de Marigny, and he arrogantly claimed that only he “could be sensitive to joining a body and head together in accord with the rules of perspective.” 50 It is owing, perhaps, to this dilemma—or to his desire to lend liveliness to the sitter and the illusion of spontaneity to his laboriously constructed portraits—that with varying degrees of emphasis he superimposed bold, draftsmanly marks in red chalk or white or blue pastel on the blended mass of skin tones in his works executed during this phase of his oeuvre, among them the Metropolitan’s composition (Figure 1), a highly finished study of Garnier d’Isle (Figure 14), Le Père Emmanuel (1757, Musée Antoine Lécuyer, Saint-Quentin), and Self-Portrait (1764, Norton Simon Museum, Pasadena). These effects, which are readily visible but sometimes bear little meaning on close inspection, read most plausibly at a distance, where they unite with the underlying foundation.

Whether from near or afar, fidelity to nature was above all the defining premise for portraiture in the eighteenth century, and meeting the many demands of this benchmark was intimately tied to the way in which the pastelist manipulated his fragile medium. Employing different methods but with equal and consummate skill, both La Tour and Perronneau convincingly, if not always consistently, met the expectations of their viewers.
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NOTES

5. Stretchers, which can be keyed out, were introduced in France in the late 1750s, but few oil paintings mounted on stretchers survive from before the late eighteenth century; personal communication, Dorothy Mahon, Conservator, Paintings Conservation, Metropolitan Museum. See Didierot Encyclopedia: The Complete Illustrations, 1762–1777 (New York, 1978), vol. 3, pls. 144, 145; James Ayres, The Artist's Kit: A History of Tools, Techniques and Materials (Oxford, 1985), p. 234. Stretchers for pastels were of varying design: mortise and tenon; half-lapped or ship-lapped; butt-jointed; with or without diagonal corner supports.
6. The imprint of a strainer on the perimeter of a pastel, as in Rosalba Catierra’s Portrait of Gustavo Hamilton, Second Viscount Boyne, in Masquerade Costume (1730–31; MMA 2002.22), results from pressure exerted on the verso of a composition by the wooden bars if their inner edges are not beveled. The Garnier d’Isle strainer must be viewed perhaps in the context of contemporary joinery practices, notably the lack of finish encountered in the interior of eighteenth-century French case furniture; personal communication, Marijn Manuels, Associate Conservator, Objects Conservation, Metropolitan Museum.
7. Picture frame dimensions would have determined the size of the mounted pastel. However, in the eighteenth century paper was limited in size to that of the paper mold, which, in turn, was only as large as the breadth of the papermaker’s arms. Among the many examples of a working surface enlarged with additional paper are La Tour’s monumental portrait Président Gabriel Bernard de Rieux, ca. 1739–41 (200 x 150 cm.; J. Paul Getty Museum, Los Angeles), and Jean-Étienne Liotard (1720–1789), Self-Portrait with a Beard (97 x 71 cm; Musée d’Art et d’Histoire, Geneva). Exposing and inpainting the linen backing is less common; examples maybe found in pastels by John Singleton Copley (1738–1815), who based his technique on European models. See Marjorie Shelley, “Painting in Crayon: The Pastels of John Singleton Copley,” in Carrie Rebora et al., John Singleton Copley in America, exh. cat., Museum of Fine Arts, Boston, and The Metropolitan Museum of Art, New York (New York, 1996), p. 132.
8. Among the treatises describing these procedures are John Russell, Elements of Painting with Crayons (Dublin, 1773), p. 18; Chaperon, Traité de la peinture au pastel, pp. 334–35; A. Constant de Masson, A Treatise on the Art of Painting and the Composition of Colours . . . [translated from the French ed.] (London, 1797), p. 110. The fibrous clusters, knots, and inclusions in paper resulted, generally, from a furnish composed of unsorted rags and from debris that was not eliminated from the pulp prior to the beating stage of paper formation.
10. The thick and irregular brush-coated preparation in various pastels by Elisabeth Louise Vigée Le Brun (1755–1842) may have been inspired by the gesso grounds she used in her canvases and panel paintings. This texture has been observed when examining her pastels in raking light; see, for example, Joseph Baillio, “Vigée Le Brun: Pastelliste et son portrait de la duchesse de Guiche," L’oeil, no. 452 (June 1993), pp. 20–29, fig. 1, La duchesse de Guiche, 1784; and Old Master Drawings, sale cat., Christie’s, New York, January 24, 2001, lot 126, An Allegorical Portrait of a Lady as Diana, Bust-length Looking to the Left, 1777. Passages of this type of ground are also present in Anton Raphael Mengs, Pleasure, ca. 1755–60, Metropolitan Museum (2005.231).
12. Many eighteenth-century blue papers that have retained their rich coloration were made from indigo-dyed rags, rather than from rags that were dyed in the vat during the beating of the pulp; Peter Bower, “Coloured Papers,” Quarterly (British Association of Paper Historians), no. 45, (January 2003), p. 47.
13. For example, Jean-Étienne Liotard, Self-Portrait with a Beard; Jean Baptiste Siméon Chardin, Portrait de Chardin au Cheveté (1778–79; Musée du Louvre, Paris); Marie Suzanne Roslin (1734–1794), Self-Portrait with the Portrait of Maurice Quentin de La Tour Painting His Index Finger (private collection; illustrated in Xavier Salmon, Le voleur d’images: Maurice-Quentin de La Tour, exh. cat., Musée National des Châteaux de Versailles et de Trianon (Paris, 2004), p. 55.
14. Maurice Quentin de La Tour to Belle de Zuylen, April 14, 1770, in Le cabinet de l’amateur, ed. Eugène Piot (Paris, 1865), p. 16: “mettre avec une brose une légère teinture d’ocre jaune à l’eau simple, bien délayée ensemble avec un peu de jaune d’œuf sur du papier bleu; cela empêche le lourd qu’il est difficile d’âtrier par la quantité de couleurs nécessaires pour couvrir le bleu du papier.”
15. Russell, Elements of Painting, p. 23.
16. Unlike abrasion, in which pastel powder has been rubbed off the projecting grain of the paper, in the jacket (lower right) of the Olivier Journel portrait the pastel sits on the surface of the sheet, and the hollows are devoid of powder—an effect that occurs when a crayon is lightly stroked across the surface.
18. Russell, Elements of Painting, pp. 19–20. Media recommended for this purpose varies; for example, Carington Bowles (The Artists Assistant in Drawing . . . , 2nd ed. [London, 176–], p. 39), lists charcoal and white, black, or red chalk for the preliminary drawing.
19. Other examples of works in which carbonaceous underdrawing media have been revealed using infrared reflectography are John Singleton Copley, Portrait of the Artist (1769; Winterthur Museum, Winterthur, Delaware) and Portrait of Mrs. Edward
20. For La Tour, each preliminary drawing corresponded to a stage in the production of the definitive composition; Christine Debrée and Xavier Salmon, Maurice-Quentin de La Tour: Princesse des pastellistes (Paris, 2000), p. 207. La Tour made many studies similar in technique to that used in the préparation of Louis de Silvestre. With the latter (a study for the finished pastel of the sitter in the Musée Antoine Lécuyer, Saint-Quentin), the accents of blue pastel were probably not intended to serve as colored strokes but, rather, as corrections, merging with the dark blue support whose original color is well preserved on the verso of the sheet. A similar technique was used by Pierre-Paul Prud'hon (1758–1823) in his schematic study of The Medici Venus (Old Master Drawings, sale cat., Sotheby’s, New York, January 21, 2004, lot 139); the black and white chalk lines were preliminary to the next stage, where they would be blended to produce masses of shadows and highlights.

21. Russell, Elements of Painting, pp. 18, 20–23; Chaperon, Traité de la peinture au pastel, pp. 222–28. Dead coloring could also be done before the paper was pasted to the canvas; the moisture in this process strengthened the attachment of the colors. Several of the various stages of laying in color are visible in an unfinished pastel attributed to Jean Étienne Liotard, Portrait of a Lady (Old Master Drawings, sale cat., Sotheby’s, New York, January 21, 2004, lot 103), in which areas of the attire are summarily drawn and the strokes are not modulated, in contrast to the treatment of the face, with its careful hatching and blending of the colors, as well as highlights, shadows, and details.


23. Chaperon, Traité de la peinture au pastel, pp. 28–197. Descriptions of color preparation and crayon fabrication, as presented in many eighteenth-century pastel treatises, was not for the purpose of providing the artist with instructions to be followed, as would be the case in oil painting, but in order that the practitioner be well informed.

24. Maurice Quentin de La Tour to the Marquis de Marigny, August 1, 1763, in J.-J. Gueffry, Correspondance inédite de Maurice Quentin de La Tour,” Gazette des beaux-arts, 2nd ser., 31 (March 1, 1885), p. 211.

25. "J.-B. Oudry—Discours sur la pratique de la peinture et ses procédés principaux: Ébauche, peindre à fond et retoucher," in Le cabinet de l’amateur, ed. Piot, p. 109. The practice of a pre-mixed palette incorporating white oil paint to produce tints became commonplace by the end of the seventeenth century. See John Gage, Color and Culture: Practice and Meaning from Antiquity to Abstraction (Berkeley, 1990), pp. 178–80. This process is described, as well, by William Hogarth (The Analysis of Beauty [London, 1731]) and Michel François Dandré-Bardon (Traité de peinture [Paris, 1755]), among others. Pastellists had the same limited number of pigments available to them as did oil painters; however, their full-strength pure colors, mixtures of colors, and multitudes of tints made by the combination of a white pigment with colored pigments, amounted to a vast range of hues.

26. Warnings against the disastrous consequences of overworking pastel were given in all the handbooks and frequently noted by critics, among them: Russell, Elements of Painting, p. 22; Chaperon, Traité de la peinture au pastel, p. 221.


30. Maurice Quentin de La Tour to Belle de Zuylen, April 14, 1770. Le cabinet de l’amateur, ed. Piot, p. 16: “ne pas tournement les teintes quand elles sont justes, de passer légèrement le petit doigt, d’employer peu de couleurs et de conserver le papier pur pour les ombres fortes.”

31. Ibid., p. 15.

32. Charles François Lenormand de Tourneheim, Director of the Bâtiments du Roi, instituted this initiative. Included in the mandate of this broad effort was the revival of antique methods of painting, such as encaustic, and the preservation of works of art, which included methods of varnishing, transferring frescoes and panel paintings, and refining oil paintings. See Andrew McClellan, Inventing the Louvre: Art, Politics, and the Origins of the Modern Museum in Eighteenth-Century Paris (Cambridge, 1994), pp. 18, 25–30. In 1747 Étienne La Font de Saint-Yenne was the first to propose that a museum be established in the Louvre to provide the public and artists with art-historical education; see his pamphlet, Réflexions sur quelques causes de l’état présent de la peinture en France, avec un examen des principaux ouvrages exposés au Louvre le mois d’août 1746 (The Hague, 1747).


35. Maurice Quentin de La Tour to Belle de Zuylen, April 14, 1770, in Le cabinet de l’amateur, ed. Piot, p. 15. He states in this letter that the pastel was executed in 1744. It became his reception piece in 1746.


37. This technique for fixing is described in Chaperon, Traité de la peinture au pastel, pp. 316-17.

38. Because of the limitations in identifying organic substances nondestructively, and given the minute amount of fixative present in any sample, identification of this material was not possible with the instrumentation presently available.

39. Among the many anecdotes recounting La Tour's ability to create an illusion is one related by Mariette in which a wife mistakes a portrait by La Tour for her husband (Abecedario de P. J. Mariette, vol. 3, pp. 66-78, quoted in Bury, Maurice-Quentin de La Tour, p. 42).

40. The technique of adding gouache to compositions in pastel was also practiced in the seventeenth century. In the eighteenth century Liébard frequently rendered details in gouache, as in Girl in Turkish Dress with a Tambourine (private collection), where the necklace is executed in this medium. Another version of this pastel is illustrated in Renée Loche and Marcel Roethlisberger, L'opera completa dei Liébard (Milan, 1978), pl. V.

41. Hal Opperman, J.-B. Oudry, 1686-1755, exh. cat., Kimbell Art Museum, Fort Worth (Fort Worth, 1983), pp. 211-12. Oudry discussed the relative relationships of colors in his 1749 lecture "Réflexions sur la manière d'étudier la couleur en comparant les objets les uns avec les autres"; see "Mémoire lu à l'Académie Royale de Peinture et de Sculpture dans la séance du 7 juin 1749," in Le cabinet de l'amateur et de l'amateur, ed. Eugène Plot, vol. 3 (Paris, 1844), pp. 33-51. Perronneau painted Oudry's portrait in 1753 as one of his reception pieces for the Académie Royale. In addition, according to Opperman (J.-B. Oudry, p. 85), Perronneau was present at Oudry's lecture of December 1752, one of two he presented on color. These circumstances would suggest that the artist had firsthand knowledge of the latter's work and artistic principles. The White Duck is illustrated in John Gage, Color and Culture: Practice and Meaning from Antiquity to Abstraction (Boston, 1993), fig. 158.


43. Raman analysis was carried out by Silvia Centeno, Associate Research Scientist, Department of Scientific Research, Metropolitan Museum. This substance is unlikely to have served as a fixing agent as it is confined to very specific sites on the shoulders.

44. See, for example, Lettre sur l'exposition des ouvrages de peinture et de sculpture du Salon [sic] du Louvre, 1769 (1769): "... mais il me semble que ce n'est pas en général le ton de la nature, elle n'est pas si hâtive, le local en est trop roux"; quoted in Vaillat and Ratois de Limay, J. B. Perronneau, p. 47.


46. Roger de Piles, Conversations sur la connaissance de la peinture, et sur le judgement qu'on doit faire des tableaux (Paris, 1677), pp. 300-301.

47. McClellan, Inventing the Louvre, p. 74.


49. La Tour was criticized by the Salon reviewers—among them, La Font de Saint-Venne (1747), Pierre Estève (1753), and Garrigue de Froment—for failing to blend his colors. His abrupt, choppy strokes, visible when viewed closely, diminished the sitter's resemblance. See Salmon, Le voleur d'âmes, pp. 84, 91 nn. 9-11.

50. Maurice Quentin de La Tour to Marquis de Marigny, August 1, 1763, in Guiffrey, "Correspondance inédite de Maurice Quentin de La Tour," p. 211.
A Technical Study of John Singer Sargent’s Portrait of Madame Pierre Gautreau

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I suppose it is the best thing I have done," John Singer Sargent wrote in 1916 to his longtime friend Edward Robinson, director of the Metropolitan Museum, offering to sell his portrait of Madame Pierre Gautreau (Figure 1, Colorplate 15) to the Museum for what was, at the time, a very modest price.1 Despite his expatriate status, Sargent considered himself fundamentally American and wished that his most significant work be displayed permanently in America's preeminent museum. The painting had crossed the Atlantic for the 1915 Panama-Pacific International Exposition in San Francisco, and the moment seemed right for it to remain in the United States. Although many years had passed since the scandal erupted surrounding its debut, Sargent stipulated that the sitter remain anonymous. He wrote to Robinson, "By the way, I should prefer, on account of the row I had with the lady years ago, that the picture should not be called by her name, at any rate for the present, and that her name should not be communicated to the newspapers."2 The director accommodated Sargent, and the painting was called Portrait of Madame X, a title similar to one Sargent had chosen when he first exhibited the picture at the Salon of 1884. Portrait of Madame ***.3

Sargent had approached Madame Gautreau—the American-born Virginie Avengno married to the Parisian banker Pierre Gautreau—indirectly through his close friend Ben Castillo. In requesting to paint her portrait, he confided to Castillo, a cousin of the young woman, that he had "reason to think she would allow it and is waiting for someone to propose this homage to her beauty." No doubt attracted by her exotic or somewhat bizarre appearance, he wrote to his childhood friend Vernon Lee, "Do you object to people who are 'fardées' to the extent of being a uniform lavender or blotting-paper colour all over? If so you would not care for my sitter; but she has the most beautiful lines, and if the lavender or chlorate of potash-lozenge colour be pretty in itself I should be more than pleased."4 The young painter's ambition was to create a magnificent entry for the 1884 Salon in order to secure his reputation as a prominent portrait painter in Paris society.

Arrangements were made, and Sargent set off for Gautreau's country house in Brittany, Les Chênes Parême, in the summer of 1883. The difficulties presented by the task and the ensuing controversy surrounding the appearance of the portrait at the Salon of 1884 are recorded in Sargent's correspondence and by contemporary commentators. On the first day of the exhibition, crowds gathered ridiculing the image and impugning the character of the sitter. Paul Curtis, a friend of Sargent's and fellow painter, describes the events in a letter to his parents. "There was a grand tapage before it all day. In a few minutes I found him [Sargent] dodging behind doors to avoid friends who looked grave. By the corridors he took me to see it. I was disappointed in the color. She looks decomposed. All the women jeer. Ah voilà 'la belle!' 'Oh quell [sic] horreur!' etc. . . . All the a.m. it was one series of bons mots, mauvaises plaisanteries and fierce discussions. John, poor boy, was navré." Although contemporary critics made no specific reference to the sexually suggestive fallen strap, the décolletage was considered indecent, and it appeared to many that the gown was about to slip off. Madame Gautreau and her mother demanded the portrait be withdrawn to put an end to the humiliation. "Ma fille est perdue—tout Paris se moque d'elle." Sargent refused, insisting that he had painted her exactly as she was dressed. One reviewer emphasized the social significance of capturing the psychology of a professional beauty, consider-

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Figure 1. John Singer Sargent (American, 1856–1925).
Madame X (Madame Pierre Gautreau), 1883–84. Oil on canvas, 208.6 x 109.9 cm. The Metropolitan Museum of Art, Arthur Hoppock Hearn Fund, 1916 (16.53). See also Color-plate 15.
Having the portrait the ultimate depiction of a social stereotype. All individuality has been suppressed, and the subject has been condemned by society to play a role based solely on her appearance.\footnote{Perhaps fearing that the portrait would be taken by the family and destroyed, Sargent removed it just prior to the closing. His hope and expectation that this submission would secure his reputation as a brilliant portraitist, to be followed by important commissions from Parisian society, were ruined. It is not surprising that, by 1886, he had left Paris to establish himself in London.}

A thorough technical examination of the physical evidence afforded an opportunity to confirm contemporary accounts and gain further insight into the transformations of this intriguing image. In his correspondence, Sargent refers to the many attempts to restart the portrait as he tried to capture the distinctive profile of the famous beauty. Responding to his friend Lee, he writes, “Your letter has just reached me still in this country house struggling with the unpaintable beauty and hopeless laziness of Madame Gautreau.”\footnote{X-radiography reveals the extent of Sargent’s numerous adjustments, most notably to the position of head and arms (Figure 2). To highlight the changes, an outline of the figure’s final profile has been superimposed on the X-radiograph. Close inspection of the head reveals at least eight profiles moving left to right. The advancing profile required him to shift the placement of the ear by more than two inches (Figure 3). Of the numerous preliminary drawings, one in the Museum’s collection particularly demonstrates Sargent’s obsession with the contours. Here the artist’s characteristic loosely sketched pencil lines describing the head and hairline stand in startling contrast to the heavy-handed, multiple redrawings of the facial features (Figure 4).}

The dark shadow on the proper right shoulder in the X-radiograph (Figure 2) reveals the artist’s intention, at an early stage, to place the strap over the shoulder. Adjustments were made to the décolletage, which was more extreme originally. It is also clear that Sargent considered positioning the sitter’s right hand on her hip, with the wrist bent back, similar to the
arrangement seen in the portrait of Mrs. Harry Vane Milbank, the mother of his close friend Albert de Belleruche (Figure 5). Apparently in progress at the same time, although signed, this casually painted portrait’s sketchy and unfinished appearance and its close similarity to the X-radiographic image of Madame X suggest that it may have served as a practice piece for Sargent as he settled on his final ideas for Madame X.7

The only known photograph of Madame X as it appeared in the Salon in the spring of 1884 is in a scrapbook compiled by the Sargent family and donated to the museum in 1950 (Figure 6). This large-format black-and-white photograph and a wood engraving made in 1884 by Charles Baude captured the earlier appearance of the picture.8 Although the early photograph records in black and white, it is most interesting to note how different the background looks when compared with what one sees today. Further examination with infrared reflectography reveals the strap as it appeared when the portrait was exhibited in 1884, slipped down from the right shoulder, as well as the shift in the perspective of the tabletop (Figures 7, 8).

When the painting was lined and restretched in 1926, paper tape was attached on all the borders covering one inch of the painted surface along each
edge. During conservation treatment in 1996, removal of the tape exposed the edges of the painting, affording a glimpse of the color transformations in the background and confirming that the portrait was started on a working stretcher. This practice, consistent with other works by the artist, frequently results in passages along the edges that are not fully painted out. In addition, it is clear that further adjustments to the background were made after the painting was framed. During the nineteenth century an artist often finished a picture after it was framed, in order to weigh the significant considerations imposed on the presentation by the typically heavy nineteenth-century
wood-and-plaster frame construction. The practice of continuing to paint after framing was done surely to avoid repeated handling of a cumbersome frame as much as from the aesthetic impulse to balance the picture to its surround.

Henry James visited the Sargent studio on boulevard Berthier in February 1884 while the artist was working to complete the portrait for the spring Salon. The following summer he recalled the portrait in a letter to Lizzie Boote, describing the palette as “blue, green, white, black.”

Predominantly blue, blue-green, and black passages are preserved along the edges (Figure 9, Colorplate 11). Further glimpses of the first background can be seen in the depths of the extensive wide-aperture drying cracks that have developed throughout the background, no doubt a consequence of the continuous reworking. Certainly James’s reference to white and black invokes the artist’s intention to portray the extreme contrast between the black dress and the sitter’s very pale flesh. The present subtly colored flesh tones, so characteristic of Sargent, are well preserved. Contemporary critics describe a pale, monochromatic palette, lack of modeling in the face, and a generally macabre and cadavariqué appearance. Sargent’s intention to emphasize the remarkable contrast between the exquisitely pale flesh tone and the rosy tint of the ear is accomplished by a pure unmixed application of genuine rose madder (Figure 10, Colorplate 13). This feature was also remarked upon by contemporaries.

Sargent refers to further changes to the background in a letter to his friend Castillo: “One day I was dissatisfied with it and dashed a tone of light rose over the former gloomy background.” Passages of rose are most clearly preserved along the upper right, lower left, and top edges. Careful inspection in a good light reveals that a rosy flush is just visible along the outline of the figure. The background visible in the early black-and-white photograph (Figure 6) was clearly more active, displaying a wider tonal range and a very colorful palette.

The historic photo of Sargent in 1885 in his Paris studio documents the change to the position of the jeweled strap following the Salon (Figure 11). The technical evidence strongly suggests that a significant repainting of the background also took place, perhaps altering the appearance in a more striking way than has been recognized previously. The final effect was
achieved by the application of a loosely brushed mixture of yellow ochre, white, and black that cooled and quieted the first, more colorful and lively background. From a normal viewing distance the present appearance is rather neutral and somewhat flat. However, close inspection reveals the loose bravura brushwork so characteristic of the artist (Figure 12, Colorplate 12). Where the semiopaque yellow ochre scumble was more thinly applied, the optical mixing of the yellow ochre and rose tone beneath created a cool mauve hue. Surely Sargent intended to unify and simplify this feature. Perhaps he was motivated to repaint the background in response to one of the very few favorable critics, Louis de Fourcard, who, in his 1884 review in the Gazette des beaux-arts, described the
portrait as a towering design in cameo. By neutralizing the colorful background Sargent placed the emphasis on the sinuous outline and enhanced the sculptural effect and subtle tincture of the flesh tones. Adjustments were also made to simplify the shadow at lower right and the floor. Paint samples mounted in cross section reveal the clear and consistent presence of a varnish layer between the rosy-tone layer and the surface, further evidence that the artist’s reworking occurred after the painting was exhibited at the Salon. Development of the extensive network of wide-aperture drying cracks was exacerbated most likely by the changes made over a varnished surface.16

During examination, passages of a curious texture consisting of many minute raised bumps that effectively catch and scatter the light required further investigation. These textured passages, specific to the hair and the velvet bodice, were subjected to analysis in order to determine whether this was an effect intended by the artist or a change due to natural aging or earlier conservation treatments (Figure 13). Analysis of a sample mounted in cross section revealed that the textural effect is the consequence of the formation of lead soaps resulting from the chemical interaction of lead white and linseed oil over time (Figure 14, Colorplate 14).17

John Singer Sargent’s notorious portrait continues to captivate Museum visitors today because of its commanding presence. It is a testament to the artist’s creativity as well as to his sound technique that despite extensive alterations and subsequent natural changes, Madame X remains a powerful and essentially well-preserved image and one of his most important social and artistic statements.
NOTES

5. Ibid., John Sargent, pp. 61-63.
11. Analyses were carried out on paint samples mounted in cross section (Figure 14, Colorplate 14). Raman spectra were recorded with a Renishaw System 1000 spectrometer using 785 and 514 nm lasers. The laser beams were focused on different areas of the cross sections using 50 objective lenses. Powers on the order of 1–5 mW were used with accumulation times of between 10 to 100 seconds. Spectra of the unknown samples were compared with those of reference compounds. The main component of the blue layer was identified as cerulean blue in combination with lead white and some ultramarine particles. The elemental composition of the cerulean blue reference sample (N. Stolow Reference Collection, Paper Conservation, Metropolitan Museum) used for the Raman identification was confirmed by Mark T. Wypyski, Research Scientist, Department of Scientific Research, Metropolitan Museum, by energy dispersive X-ray spectroscopy (EDS) and was found to contain Co and Sn with minor amounts of Cr, Mg, Al, and Ba. The pigments in the green layer were identified as viridian (chromium III oxide dehydrate) and carbon-based black.
14. A red iron oxide, lead white, carbon-based black, and vermilion particles were detected by Raman microscopy in the rose-colored layer. When the cross section (Figure 14, Colorplate 14) was viewed under UV illumination, an orange fluorescence from some particles indicated that these most probably were madder.
15. The yellow iron oxyhydroxide goethite was detected by Raman spectroscopy in two microscopic surface scrapings of the background to the right of the figure, located 8.5 cm from the right edge and 73.7 cm from the bottom of the painting. This pigment is most probably in the form of a yellow ochre, a natural earth where iron oxides are mixed with silica and clay, though no Raman bands for these latter compounds were observed. Some reddish particles in this sample were found to contain another iron oxyhydroxide, namely, lepidocrocite, but these may be contamination from the rose-colored paint layer beneath. In addition, lead white, carbon-based black, and a few vermilion particles were detected in the yellow ochre–colored top layer in the cross section (Figure 14, Colorplate 14).
16. In the technical study by Ridge and Townsend, “John Singer Sargent’s Later Portraits,” p. 28, the authors have observed that, in general, it was not Sargent’s practice to varnish between paint layers during the painting process. In the cross section from Madame X, the consistent presence of a varnish layer beneath the final layer strongly suggests that the present background was painted by the artist after it was exhibited at the Salon.
17. The ground is a medium light, dull pink color composed of lead white tinted with particles of red iron oxide, both identified by Raman microscopy. It appears to be a commercial product and is very similar to the ground of another portrait by Sargent, Lady with the Rose (Charlotte Louise Backhardt), MMA 32.154, dated 1882. The irregularly shaped areas, whiter under visible illumination and fluorescent under UV illumination (Figure 14, Colorplate 14), showed modes characteristic of lead carboxylates. The strongest Raman bands observed in these whiter areas at 1444, 1411, and 1291 cm\(^{-1}\) are consistent with the previously published data on lead oleate. See L. Robinet and M.-C. Courbet, “The Characterization of Metal Soaps,” Studies in Conservation 48 (2003), pp. 23–40. The chemical changes in the composition of ground or paint layers consisting of lead white, or other heavy metal–containing pigments, and an oil binder have been described by several authors as a dissolution of the original pigment matter to form soaps (metal carboxylates, that is, salts of the metals present in the pigment and carboxylic acids in the oil binder), followed by their aggregation, expansion, and remineralization. See J. J. Boon et al., “Mechanical and Chemical Changes in Old Master Paintings: Dissolution, Metal Soap Formation and Remineralization Processes in Lead Pigmented Paint Layers of Seventeenth Century Paintings,” in Thirteenth Triennial Meeting, Rio de Janeiro, 22–27 September 2002: ICOM Committee for Conservation Preprints (2002), vol. 1, pp. 401–6, and M. J. Plater et al., “The Characterization of Lead Fatty Acid Soaps in ‘Protrusions’ in Aged Traditional Oil Paint,” Polyhedron 22 (2003), pp. 3171–79. This process results in the formation of lumps that protrude up and sometimes through the paint surface, as observed in some areas of the present painting, most prominently in the hair and velvet bodice (Figure 13), where a textured surface can be observed under raking light. The cross section illustrated in Figure 14 and Colorplate 14 was taken from the background of the painting 22.9 cm from the right edge and 40.5 cm from the bottom edge, where the formations of the lead soap are not apparent on the surface.
About Mäda

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The nearly universal enthusiasm for the work of the painter Gustav Klimt (1862–1918) and the architect Josef Hoffmann (1870–1956)—and more broadly for Viennese art of the early twentieth century and the Wiener Werkstätte, or Vienna Workshops—at present does not extend to the sculpture of their contemporary Anton Hanak (1875–1934). Although writers in German-speaking countries compare Hanak to Auguste Rodin, who influenced him, Hanak’s work is little if at all known outside Austria, the Czech Republic, and Germany. Hanak, a major figure in Vienna in the teens and twenties, introduced Mäda Primavesi’s parents, Otto (1868–1926) and Eugenia (1874–1963; Figures 1, 2), to Hoffmann and Klimt. The latter was Viennese by birth; Hoffmann and Hanak were Moravian, born, respectively, in Brünn (modern Brno) and Pirnitz (modern Brtnice), within the northern borders of the Austro-Hungarian Empire. All three received their academic training in the cosmopolitan milieu of Vienna. Klimt was a phenomenon much unto himself, while Hoffmann and Hanak were influenced by their native craft and folklore traditions.

The banker and industrialist Otto Primavesi, a frequent visitor to Vienna, was from Olmutz (modern Olomouc), the second city of Moravia. Eugenia Primavesi and Hanak’s wife Juliane were both natives of Langenzersdorf, near Vienna. In 1901, Hanak settled in Langenzersdorf with his family. Three years later Eugenia, while visiting her parents, was introduced to the sculptor and commissioned her portrait bust from him. In this way, a first link between several influential artists and two of their principal patrons was established. Otto and Eugenia developed an intimate friendship with Hanak. The larger group was particularly close in the years immediately before and at the outset of World War I, when Eugenia and her daughter Mäda sat for Klimt (Figure 3, Colorplates 16, 17). and when Hoffmann designed the Primavesi country house at Winkelsdorf, decorated in its entirety by the Wiener Werkstätte. The death of Klimt in 1918 marked the beginning of the end of an almost familial association that had been fostered by Eugenia and Hanak. The Winkelsdorf house was destroyed by fire in 1922. Financial reverses suffered by Otto Primavesi in the aftermath of the war and disagreements between Otto and Eugenia over the continued funding of the Wiener Werkstätte, which he felt he could no longer afford, were contributing factors in the couple’s decision to separate in 1925. Otto withdrew entirely from sponsorship of the Wiener Werkstätte, turning his interest over to his wife. In 1926, he died. The sculptor also died relatively young, in 1932, which was the year the Wiener Werkstätte, established in 1903 but never financially secure, closed their doors for the last time.

After the dissolution in 1918 of the Austro-Hungarian empire, Hoffmann, Hanak, and Otto Primavesi were foreign nationals in the land of their birth, which lay within the borders of what is now the Czech Republic. For those who survived and remained or settled permanently in Vienna—that is, Hoffmann and Frau Primavesi with her children—the end of World War II brought a more drastic and inviolable separation. In 1949, to escape the threatening atmosphere of postwar Vienna and in the hope of securing a more promising future for members of her family, Mäda Primavesi settled in Canada. In the autumn of 1986, she visited New York to see “Vienna 1900” at the Museum of Modern Art. Having discovered that Klimt’s portrait of her as a child belonged to The Metropolitan Museum of Art, she came on various occasions to see it (Figure 4). What Mäda Primavesi told me about herself, her family, and the artists they knew is amplified below with material from more recently published sources.

On October 8, 1904, Eugenia Primavesi called on Hanak, having learned from her father, Gustav Butschek, that the young sculptor had recently won a
prize at the Vienna Academy to study in Rome.⁴ Accompanied by her mother, Frau Primavesi examined works that he had in his studio and asked whether she could sit for him upon his return from Italy. He gratefully observed that this was his first commission as an independent artist—as it was her first commission as a patron of the arts. From November 1903 until the late spring of 1905, Hanák was abroad. Although he wrote to the couple about the bust on March 28, July 21, and August 17, 1905, apparently it was not completed until summer 1906. Photographs of Hanák’s studio taken during this period show that his plaster study was an accurate portrait, whereas the artist made the point that the finished marble (Figure 1) was of a more intuitive and reflective nature.

Born in 1874, Eugenia was Hanák’s close contemporary. As her daughter Mada explained, she was of good family (her father was a successful railroad executive). She studied acting and, although her aspirations to a career in the theater were not encouraged by her parents, she was permitted to go on the stage at the age of eighteen. She had some success until, in November 1895, at twenty-one, she married Otto Primavesi, who had pursued her throughout her brief career against the wishes of his family. Following a summer visit to his parents at their house near Olmütz, Eugenia was declared a suitable bride for Otto, who was a Roman Catholic of North Italian descent. The Primavesis were among the most prominent, and Otto among the most successful, inhabitants of Olmütz. Otto and Eugenia had four children: Otto (born August 30, 1898), Lola (born July 6, 1900), Mada (born December 22, 1903), and Melita (born July 27, 1908), called Litta (Figure 5).⁵ Not long after Mada’s birth, the couple commissioned a villa from the Viennese architects Franz von Krauss and Josef Tölk. A massive block in accordance with Central European tradition, with a central hall after the English model and a walled garden, it stood on the ramparts of the city.⁶
The Primavesis intended to decorate the villa with sculpture by Hanak, who was in their employ from summer 1905 until the end of World War I. Olmütz was a journey of six hours or more by train from the Austrian capital.\(^7\) Letters from Vienna in which the sculptor explained his intentions and described his projects and plans, of which there was a constant flow, are a valuable source of documentation for his œuvre. In 1906–7, Hanak carved for Otto and Eugenia the first piece designed for the house, a Night Watchman in wood, roughly two meters in height, it was described as a Hausgeist, or guardian.\(^8\) By April 1906, he had begun work on a marble wall fountain for the central hall which, although signed and dated 1907, he still had in hand in July 1908.\(^9\) He exhibited this heavily symbolic sculpture at the Vienna Secession in November and December of that year. Titled Water of Life, it shows a full-scale nude youth who appears to be drinking
water emitted from the mouth of a female mask projecting from a pilaster above his head. Both works were commissioned by Primavesi, who must also have ordered the family grave monument, Eternity, a solemn, over-life-size marble statue of a woman seated against a severe surround of black Swedish granite three meters in height. Eternity, first mentioned by Hanak in 1906, was finished in late 1909.

In January 1910, Hanak wrote about a second fountain. This sculpture, which took the form of a column supporting a cylinder to which four masks wreathed with snakes were applied and upon which stood a nude putto, symbolizing purity, was designed for a loggia or terrace of the house and seems to have been completed in 1912. The marble version of a work called Prayer, a smoothly modeled kneeling nude woman dating to 1912–13, stood on a polygonal base outside, in a position from which it could be seen from the dining room window. Sphinx, a standing nude woman also in marble, was exhibited in Rome in 1911. Mentioned by Hanak in letters dating from January 1911 to September 1912, it was his Christmas gift to the Primavesis that year. A copper relief titled Mother Leading Her Children (Figure 6) was installed in 1911 on the front door of the house, while a sculpture of Mada (Figure 7), begun at roughly the same time, is referred to as late as 1915. (Mada reported that she was her father’s favorite child, and she did not find it surprising that she was the only one of the four of whom portraits were commissioned from Hanak and Klint.)

From 1898 until he completed the course with honors in 1904, Hanak had trained at the Vienna Academy with Edmund Hellmer (1850–1935), who worked on a large scale in an overwrought neobaroque style that was soon to go out of fashion. Hanak’s most important sculptures represent one or several figures, usually nude, often huge, and with symbolic or rhetorical overtones. However, his forms are greatly simplified by comparison with Hellmer’s, and his surfaces vary from smooth to roughened. Hanak, of simple peasant stock, had left school at the age of fourteen. His father belonged to the working class; his mother did not speak German, the language of the Austro-Hungarian Empire. As a teenager, he had served an apprenticeship with a Viennese wood-carver. His deeply felt interest in traditional Moravian crafts had
first manifested itself in the hand-carved and elaborately painted furniture he had made for his own house when he was young. In the sole case of his projects for the Primavesi, perhaps because of their shared interest in indigenous forms, Hanak set aside monumental sculpture and ventured again into joinery and the decorative arts, carving in wood, working in metal, and designing furniture. In 1906, he supplied a hammered brass chimneypiece for the central hall of the Olmütz house. When, in 1911, he designed the copper door relief, he also laid out and supervised the making of a surrounding mosaic: he was the work master, supervising members of the household, presumably including the children. This seems to have been much in the spirit of the Primavesi, whose home life Hanak often shared. In 1913–16, he undertook his most important commission for their house, designing paneling for the dining room walls, a parquet floor, several cabinets and tables, and more than a dozen chairs, all embellished with elaborate marquetry in geometric patterns. It is likely that he participated personally in the execution of this fine example of Gesamtkunstwerk.

Evidently, Hanak exercised a compelling influence over Eugenia’s plans for a country house, which would

be built and decorated using traditional materials and details. In the early summer of 1913, the Primavesi bought land about fifty miles north of Olmütz, near Winkelsdorf, in the magnificent mountain landscape of the Altvater. Hanak urged the selection of his friend Hoffmann as architect. Introductions probably had been made on the occasion of the international art exhibition held in Rome in 1911. Hoffmann had designed Austria’s U-shaped neoclassical pavilion, which was widely acclaimed, while Hanak, the official sculptor, showed many pieces, including a symbolic group representing Austria and a single figure titled Mädchen (later Sphinx), on the terrace. Klímt’s paintings were exhibited in the semicircular main hall, while the displays in the smaller rooms featured decorative objects, notably from the Wiener Werkstätte. In 1897, Klímt and Hoffmann had been among those who withdrew from the Vienna art establishment to found the Secession. They had worked together at least since 1901/2, when Klímt’s portrait of Marie Honeberg was installed in the cabinetry surrounding a chimney in the hall of the Vienna house that
room, Hoffmann’s Winkelsdorf house (Figure 8), his new façade for the Primavesi bank at Niederring 6, Olmütz, and furnishings for two rooms of the Primavesi house in Vienna were made at the same time. Nineteen fourteen would prove fateful. In that year the young financier and textile manufacturer Fritz Waerndorfer, bankrupt as a result of his decade-long sponsorship of the Wiener Werkstätte, was obliged by his family to emigrate to the United States. Otto then invested in, and in 1915 took over, the management of the faltering enterprise. Twenty Otto and Eugenia, together with Otto’s cousin and brother-in-law Robert Primavesi, were to own roughly a 30 percent stake.

Waerndorfer and Hoffmann, two of the founders of the Wiener Werkstätte, had sought to introduce simplicity and functionality of design in architecture and the decorative arts. It was hoped that demand for the products of the workshops would lead to a fundamental change in taste and that eventually the profits could be divided among the shareholders, the designers, and the artisans. The workshops’ stores offered furniture; objects for the home and office in various materials—cutlery, glass, lamps, wastebaskets, plant stands, paper products; textiles for wall hangings, tablecloths, lampshades, and upholstery; and jewelry, frocks, and accessories for women. The costs associated with excellence of workmanship were high, and the founders’ goals were fully realized only when money was no object.

The Wiener Werkstätte required a constant flow of new capital. Otto and Robert Primavesi—the latter an industrialist as wealthy or wealthier than Otto, a landowner with a castle and estates in Moravia, and a fondness for lavish entertaining—could afford to take Waerndorfer’s place.

According to the records of Hoffmann’s architectural office, his plans and working drawings for Winkelsdorf date to late 1913 and early 1914. Two One of Otto’s sisters had married their first cousin Robert. Much beloved, she died young, and her husband, determined never to remarry, brought a young Moravian woman from the country to live with him as his companion. Mäda, not much given to romantic excess, described her as a shepherdess. Her name was Josefine Skywa. On July 30, 1913, Robert and Josefine approved Hoffmann’s drawings for an addition to their Vienna house at Trautmannsdorfgasse 56 and for two loggias for the garden. Meanwhile, the architect was planning for them a much larger house to be built at Gloriettagasse 18. The villa Skywa-Primavesi, designs for which had been approved on May 29, 1913, was ready for occupancy in January 1915. Robert was not greatly interested in the arts and can

Hoffmann had designed for Frau Henneberg and her husband, Dr. Hugo Henneberg. The Rome exhibition marked the first time the three artists exhibited together and, while the Primavesi’s awareness of the achievements of Klimt or Hoffmann, the Austrian pavilion must have exerted an enormous influence. The couple traveled to southern Italy with Hanak in the summer of 1911. In May 1912, architect, sculptor, and painter exhibited in Dresden. Hoffmann designed a high, top-lit pillared hall for Hanak’s sculptures, among which were a work the couple had commissioned and another they would subsequently acquire. By that time, Eugenia’s attention was fully engaged and Klimt had begun work on the portrait of Mäda. On February 28, 1912, the painter had noted, “Heute kommt Frau Primavesi—bin neugierig!”, that is, “Frau Primavesi comes today—am curious!” In February 1913, he was working on a portrait of Eugenia as well. The two paintings, Hanak’s Olmütz dining

Figure 8. Josef Hoffmann (1870–1956). The Primavesi country house at Winkelsdorf, 1916 (photo: after Deutsche Kunst und Dekoration 38 [June 1916], p. 198)
only have been introduced to Hoffmann, Hanak, and the products with which his splendid new house was supplied by his brother-in-law and cousin and his sister-in-law, who was fast becoming one of the workshops’ fervent supporters.24

The most lavish, complete, and perfectly preserved example of early-twentieth-century Viennese style is the magnificent house in Brussels designed by Hoffmann for his Belgian patron Adolphe Stoclet and built between 1906 and 1911.25 Klimt supplied the cartoons and specifications for the dining room frieze, which is composed of tesserae of marble, copper, silver plate, coral, semiprecious stones, gold mosaic, and colored faience made in the Vienna workshops—as were all the fittings, furniture, textiles, silver, china, and glass, mostly to Hoffmann’s specifications.26 Klimt, Hoffmann, the Primavesi, and Hanak were in Brussels on May 17, 1914, and Klimt wrote that “Frau Primavesi . . . was ‘speechless’ over the beauty of the house.”27 Only two houses approached that of Stoclet’s in scale and in the coherence of aesthetic and design, namely, Robert’s Vienna mansion and Otto’s home in Winkelsdorf. Both were begun a year before the onset of the war, and nothing of the kind was built or contemplated afterward.

For purposes of comparison, the length of the Stoclet villa (also known as the Palais Stoclet) is thirty-seven meters, while the principal façades of the Primavesi town and country houses each measure (or measured, in the case of Winkelsdorf) roughly thirty meters.28 Robert’s house survives in good condition, though modified and deprived of its furnishings.29 Its style is classicizing, the exterior boldly articulated and embellished with figural sculpture by Hanak. Only some exquisitely finished details of the formal interior survive: the salon floor of lemon wood inlaid with black lozenges, the oak paneling of the great hall with its stylized bouquets, radiator grills, marble door frames, and stucco work of delicately curving tendrils, leaves, fruit, and blossoms.

Winkelsdorf, which was built on high ground overlooking the forested slopes of the Altwater, was an informal retreat for Otto and Eugenia (Figure 9), their family, and intimate friends.30 Its style and the lifestyle of its residents reflected the couple’s convictions and those of the sculptor and the architect. Eugenia was deeply preoccupied with the upbringing of their children and dedicated to the principles of an ordered, family-centered life in a healthy environment. The Primavesi family was a matriarchy. With respect to diet, sleep, and exercise, Eugenia adopted regimens that were more or less strictly followed by the men of the party. She also kept track of her guests’ preferences for rooms, colors, food, and flowers. Informal evenings were devoted to amateur theatricals, music, and storytelling. An army of household help provided the necessary services. Life at Winkelsdorf, which was a magnificent artificial construct that could have been supported and sustained only by great wealth, typified the holistic prewar approach for which the products of the Wiener Werkstätte were the perfect enhancement. In 1913/14, Hoffmann and Klimt joined Hanak as members of the Primavesi family circle.

Winkelsdorf stood in stark contrast to the Stoclet house and the villa Skywa-Primavesi as an expression of Moravian folk art writ large. The style had been carefully tailored to suit the landscape and meet the

Figure 9. Eugenia Primavesi at Winkelsdorf, ca. 1916. The sitting room was decorated principally in shades of green (photo: private collection)
Figure 10. Entrance to the house at Winkelsdorf. The entrance hall was lacquered in black and gray on white (photo: after Deutsche Kunst und Dekoration 38 [June 1916], p. 202).

Figure 11. Guestroom at Winkelsdorf. The colors were violet and white (photo: after Deutsche Kunst und Dekoration 38 [June 1916], p. 224).

Figure 12. Children’s playroom at Winkelsdorf. The color scheme was red, dark blue, and white (photo: after Deutsche Kunst und Dekoration 38 [June 1916], p. 217).
family’s particular needs. Nineteen eleven to 1914 witnessed the height of Hoffmann’s classicist phase, a period bracketed by the commissions for the Austrian pavilion in Rome and the exhibition of the German Werkbund in Cologne. The Landhaus Primavesi was also influenced by Palladian classicism: raised on a high basement, the house displayed a symmetrical tripartite façade with a loggia, the roof of which was supported by a colossal order. However, the eyebrow windows of the attic were set into a thickly thatched roof with a supple bell-shaped profile. The columns were smoothly finished tree trunks. The walls were dressed logs, natural-colored and stained in alternation, which, when weathered, complemented the unspoiled landscape. Set in front of the windows were grilles formed of small lozenge-shaped openings, while the shutters were ornamented with colored chevrons and medallions of bright flowers.

Inside the house, walls, ceilings, cupboards, and radiator covers were adorned with latticework in square, oblong, or rhomboid patterns; doors, cabinets, and bed posts were embellished with carved geometric shapes punctuated by knobs; moldings were fluted; exposed ceiling beams were decorated with coffers and prisms; stencils were used widely (Figures 10–12). White walls or trim played up the various schemes of contrasting colors, which were matched to the Wiener Werkstätte wall coverings, curtains, portieres, lampshades, bedspreads, or upholstery. A single patterned textile was used throughout each room. Surfaces were lacquered, increasing the effects of brightness and contrast. Many of the shapes and especially the trellis-like patterns that Hoffmann employed (Figure 10) were familiar from other commissions, and the white, black, and gray palette of the entrance and stair halls was also typical of his work. On the other hand, the carved and brightly colored detailing of the living rooms and bedrooms was of Moravian inspiration (Figure 12), and Hanak’s familiarity with Moravian peasant life must have come strongly into play. Hoffmann was exceedingly busy in 1913–14 and can have been only an occasional visitor, whereas Hanak stayed frequently in the mountains.

It is unlikely that there was ever a more copious display of Wiener Werkstätte patterns in a single building. As printed fabrics manufactured by (rather than for) the workshops were first marketed in the autumn of 1910, these would have been still a novelty. The textile designers were recent graduates or instructors from the Vienna Kunstgewerbeschule, the school of applied arts, where Hoffmann and—beginning on October 1, 1913—Hanak taught. There were quantities of material with geometric and abstract patterns, but Eugenia chose fabrics based on motifs from nature, most including flowers and foliage. Some were multicolored or, especially in the secondary bedrooms, in various tones of a single color, for example, lavender, green, or dark red, combined with white. There were about a dozen different materials by a half-dozen designers, including Carl Otto Czeschka, Ludwig Heinrich Jungnickel, and Dagobert Peche. The names of the fabrics suggest their suitability to the woodland (in German, Wald) setting: Hochwald (alpine wood), Waldidyll (woodland idyll), Waldkapelle (woodland chapel), Dorfrose (village rose), and, in Māda’s room, Maierblümchen, or wallflower, though the latter is in fact a rather severe chevron pattern and does not recall flowers. Jungnickel, who had painted a frieze with trees and animals for Stoclet’s children, designed Hochwald, used extensively in the Primavesi children’s playroom (Figure 12); it featured deer, foxes, squirrels, porcupines, and birds in a forest setting.

Hoffmann’s ardent supporter and friend the Viennese critic Berta Zuckerkandl described Winkelsdorf in a lavishly illustrated article in the June 1916 issue of Deutsche Kunst und Dekoration:

It is a home blessed with children, where interior design is matched to the youthful vitality, expression, purpose and meaning of the whole. . . . In this rhapsodic house, resplendently colored and showered with ornamental decoration, . . . harmony is only achieved through an intuitive sense of ideal proportions—perhaps the absolute value of the Hoffmann style. . . . One would like to call [it his] pantheistic expression of faith.

The taste for patterns, as for folk art, primitivism, and Expressionism, were phenomena of international style at the time, and the house was widely admired. However, Māda remembered that her parents’ friend the tenor Leo Slezak demurred, commenting that while it was “certainly a very beautiful house,” he “would not like to live in it.” Māda herself did not like living in it. Having described the hand-embroidered table and bed linens, hand-painted silk curtains, and hand-carved ebony handles of the cutlery, she remarked that Winkelsdorf lacked variety. She preferred the house in Olmütz. As her portrait suggests, she was determined to be independent, but it also may be imagined that in the country she was under her mother’s thumb. She is said to have retired to the woodshed, seeking solitude perhaps, as well as relief from the chevron-patterned walls of her room.

Winkelsdorf was finished in the second half of 1914; in 1922, in the family’s absence, it burned to the foundations. According to Māda, the fire started in an attic where a maid left a hot iron unattended. When the flames reached the thatched roof, the
house was lost. Hoffmann had designed everything in it, including the servants’ rooms and the kitchen as well as the cutlery and the linen, and the house was a complete work of fine and applied art. The principal ornament was a ceramic stove designed by Hanak for the living room; otherwise, to judge from photographs taken in 1916, there were only some books and pictures. Although Klimt figured in the life of the house, there was no room for his paintings, which were at Olmütz and later in the Vienna apartment.

Otto and Eugenia and their children celebrated Christmas 1913 in Olmütz. On December 19, Klimt had written urgently to Eugenia to announce the arrival of a picture: “The frame comes this evening (Friday)—the painting will not be ready until then either, unfortunately! As shipment by fast train now, during the holiday period, is very uncertain, early Monday I will dispatch the painting together with the frame... as personal baggage. I will cancel a ticket to Olmütz here [in Vienna], check the case as personal baggage, and send the receipt to your address by registered mail. In this way the painting can, as I understand it, be there in one day—traveling unaccompanied.”

The subject is not named, but it is now generally agreed that the portrait was of Mäda (Figure 5, Colorplates 16, 17), which the sitter remembered as begun before that of her mother (Figure 2), probably shortly after February 28, 1912. On June 26, Klimt had reported from Vienna in a postcard to his intimate friend the dress designer Emilie Flöge that “Frau M.,” pleased with her daughter’s portrait, had gone away until autumn. This would suggest that he was beyond the stage of making sketches for the painting. Portrait sittings were not scheduled in the summer, when the painter, who also left the city, generally devoted himself to landscapes. Patrons often fail to understand that artists usually will not be held to schedules. Mäda remembered that later, when her father went with some impatience to Klimt’s studio to claim her portrait, he found the artist at his easel, still at work on it and unwilling to give it up. That Mäda’s tenth birthday fell on Monday, December 22, 1913, offers some further support for the supposition that the painting Klimt shipped to arrive on that date was in fact her portrait.

For Eugenia and Mäda, the journey by train to Vienna occupied the better part of a day. Once Klimt began work on Eugenia’s portrait, both mother and daughter doubtless would have had sittings during the week-to-ten-day periods that they spent in the city. Two other documents bear on the chronology of the works. The first, referred to above, is the letter from Eugenia to Hanak of February 7, 1913, in which she expresses her intention to sit again for Klimt on February 18. The second is a note from Klimt to Otto, dated June 28, 1913, in which he acknowledges with thanks the sum of 15,000 Kronen received on account for the two portraits. Perhaps the payment was intended to encourage the painter to finish them.

Klimt often sent his pictures to exhibitions as soon as, or even before, he completed them. In February 1914 Mäda’s portrait—lent anonymously, as Portrait of a Girl—was shown at the second international Secession exhibition in Rome. Klimt exhibited both the portrait of Mäda and a second portrait, dating to 1912, of the Viennese society figure and intellectual Adele Bloch-Bauer, at the 1916 Berlin Secession; he sent no portraits of later date. During the war, there were few exhibitions in continental Europe and none of Klimt’s portraits completed after that of Mäda was publicly displayed during his lifetime. Eugenia’s portrait, painted during the construction of Winkelsdorf, probably was not finished earlier than late summer 1914. Long presumed lost, it was exhibited publicly in 1987, when Mäda sold it at Sotheby’s.

Most Klimt paintings show the human figure, and most if not all were preceded by quantities of drawings. It has been estimated that over his thirty-year career, the artist completed roughly a half-dozen pictures annually, for a total of about 220, whereas some 4,000 drawings survive. The drawings indicate that he gave much time and thought to the pose for each of his full-length commissioned portraits. Judging from the sitters’ various changes of costume, several preliminary sittings were required. In the sketches, the top of the head, the feet, or the entire head may be cut off; the head may be described as a circle or an oval; or the mouth may be the only feature. The drawings, which are not shaded or detailed in any way, can have been of little use to the artist when he began painting, and he would therefore have required additional sittings. Traditionally trained, Klimt worked up his sitter’s features on canvas from life. Mäda was not alone in finding her portrait and her mother’s to be excellent likenesses. The artist must have searched for and established a pose, and, in the case at least of this painting, conceived the layout of a background; next he painted the head and probably also the hands; then he added the details of the background, either before or after the costume. Mindful of Klimt’s gifts, the women who sat for him must have been either willing allies or fully compliant. If the third stage of painting was well separated in time from the second, however, and if it did not necessarily depend upon the presence of the sitter, this would help explain Otto’s impatience.

Mäda, the only child who sat for Klimt for a commissioned portrait, recalled many long visits to his
studio during which he made drawings, and she remembered that when she was bored she was excused to play with, and dress up in, the painter’s Chinese textiles and costumes.51 She felt that he had an understanding of children and accurately captured her character: she was physically very active and brave, a tomboy, also willful, and highly imaginative. When asked how many drawings there might have been for her portrait, she answered without hesitation, “hundreds.” Māda was quite young, probably little more than eight, when Klimt accepted the commission, and she may have tired or lost interest easily. More than eighty years later, her memory may have been faulty. Still, there are myriad drawings that could have been made in minutes, and she was doubtless correct in thinking that the forty-five sketches for her portrait that have been identified are only a portion of the total. She posed in Klimt’s painting room in Josef-Städtersstrasse, which she described as white inside and out, and observed that she sat on an immense sofa upholstered in black-and-white stripes of a finger’s width. This must have been the bed with a fitted striped cover that is visible in a 1918 photograph of the artist’s final studio in the Feldmülgasse.52 The models for the erotic drawings would also have posed there. The low sofa bed would have been uncomfortable for a portrait sitter, and this may account for the various drawings of Māda and Eugenia seated in which they look awkward and ill-proportioned, their torsos too short.53

Māda first wore a day dress (Figure 13), then later a party dress (Figure 14), and finally a white lawn dress with wired flowers of colored beads and seed pearls designed for her, at Klimt’s suggestion, by Emilie Flöge (Figures 3, 15, Colorplates 16, 17). The first was the equivalent of a school dress (as Māda was tutored, she never went to school). The second, she recalled, came from a children’s specialty store in
Vienna, while for the third she went for fittings to the Schwestern Flöge, the Flöge sisters’ Vienna shop. The Schwestern Flöge does not seem, in general, to have designed clothes for children. Among the drawings of Mäda in a loose, informal dress with long sleeves and a large collar, some show her with, and some without, a hair ribbon. More often in the surviving sketches she wears the party dress, which she remembered disliking because it was starched. Sometimes her hair hangs untidily near her left eye; otherwise, it is neatly parted and fastened with a ribbon. The drawings suggest a minimum of four or five preliminary sittings. Mäda and her mother owned numerous sheets from the sittings in the day dress and the party dress, which they gave away or sold over the years. The livelier ones show Mäda standing, sometimes with one elbow thrust out and the other arm behind her back, a characteristic pose carried through to the finished picture.

All the drawings of Mäda in the Flöge dress are composition studies in which her figure is frontal and her weight evenly distributed. One, which carries the Klimt estate stamp, shows only the irregular outline of the dress from neck to hem and the sitter’s legs from hem to ankle. It seems to have been made from life. The other ten (Figure 15)—which belonged in 1942 to Flöge and were subsequently lost in the fire that destroyed her home—constitute a series of images from a small sketchbook, each image outlined on all sides. While Klimt stresses the sitter’s dark hair, hair ribbon, and out-thrust elbow, his primary concern is with the relationship of the figure to its surround, divided variously into two or three zones separated by horizontals, or by a combination of horizontals and diagonals, with some additional notations in the upper half, or the lower, or both. At this stage Klimt decided on a hip-high horizon line, a carptilelike blunt triangle behind the skirt and legs, and fills of various
relatively loose patterns. Máda remarked that the fish, birds, dog, flowers, leaves, and grasses were imaginary. She did not play a role in selecting the details of the imagery and did not regard them as of particular significance. Several of these rather amorphous shapes, notably the fish, are similar to colophon designs for a forthcoming publication on his work that Klimt drew in a sketchbook of 1913.57

Meanwhile, Máda’s mother first sat for Klimt some time before February 7, 1913. Eugenia was middle-aged and the mother of four children four to fourteen. While they were growing up, her principal role was that of a traditional wife and mother, but by the time Klimt painted her she would have thought of herself also as a patroness of the arts. Her fortieth birthday would fall on June 13, 1914, the summer her portrait (Figure 2) was probably completed. Plump and fair, Eugenia wore her fine, light brown hair pinned up in a tight roll around the back of her head. Many photographs of her survive. There was a mildness in her manner and an old-fashioned femininity to her looks which Klimt has captured, despite the violently colored garment and the chrome-yellow background. She wears many rings on her rather square, softly modeled hands. She seems to have been of a different physical type from most of the Viennese women who were the artist’s most frequent sitters. She stands in, and wears, a bright if notional flower garden. The floral motifs may have had some generic significance for her, but probably not the Chinese phoenix at upper right, as, unlike Klimt, she is not known to have had any interest in Oriental art.

Some twenty preliminary drawings for Eugenia’s portrait are known, a relatively small number, possibly just an accident of fate.58 Klimt traversed the same stages in the evolution of the design as he had for the portrait of Máda: Eugenia, noticeably thickset, wearing a conventional dress, seated, front and side views; wearing a patterned shawl or robe over her dress, seated or more often standing, front and side views; and frontal, seated or standing, wearing an unconventional loose robe of a printed material. Among the last drawings are three compositional sketches on a single sheet in which the large circles of the robe overwhelm the sitter’s form with their chaotic pattern. These relate not only to the compositional studies for the portrait of Máda but perhaps also to sketches (two or more on each of two pages) of an elongated female figure with legs widely spaced in an elaborate sleeveless costume, two of which bear the name of the distinguished Viennese architect Otto Wagner (1841–1918).59 The latter are dated to 1911, on the assumption that they were intended to honor Wagner on his seventieth birthday, which fell on July 13 of that year.

The sketches for Wagner look backward to the Klimt project for the Stoclet dining room—which Eugenia so greatly admired and the designs for which she and her husband would own—and forward to a 1912 portrait of Paula Zuckerkandl and to the second, roughly contemporaneous portrait of Adele Bloch-Bauer.60 Also related to this group are the severely frontal form and the boldly patterned, brilliantly colored exotic costume of The Maiden (Figure 16), first exhibited in Budapest in March 1913.61

Eugenia Primavesi’s willingness to wear a patterned robe for a formal portrait probably testifies to her fascination both with Klimt and with the Wiener Werkstätte. Máda did not remember anything about the evolution of her mother’s costume. But Eugenia first presented herself at the artist’s Vienna studio in a traditional day or evening gown, and Klimt’s drawings indicate that the majority of his sitters did likewise. Klimt himself worked wearing a painter’s smock, and he dressed similarly on his summer holidays. By 1907 his companion, Emilie Flöge, was designing and wearing the so-called Reformkleiden, dresses without constricting stays and thus without a waist, in accordance with the latest dictates of fashion. Shortly thereafter, the workshops introduced loose dresses made of elaborately patterned fabrics. That Eugenia later wore garments of this kind at home we know from the photograph taken at Winkelsdorf about 1916 (Figure 9). In the country, she often mandated loose robes for visitors as well as for family members, and it may be supposed that she

thought them wholesome as well as conducive to engagement in the entertainments and fantasy life of the house.

The Schwindlfest, which took the form of a house party and was a more important social event than might be envisaged from its inelegant translation as “pig roast,” seems to have been a twice-yearly event at the Primavesi country house. Even toward the end of the war, when there were shortages and want elsewhere, the family table was always laden and guests were frequently invited to the house. In late November 1914, Hanak wrote to say that both Hoffmann and Klimt would join him in attending what may have been the first Schwindlfest in Winkelsdorf. Writing a year or so later, on December 10, 1915, to Emilie Flöge, Klimt described another visit to Winkelsdorf, probably a similar occasion, that featured a “huge meal of boiled beef with horseradish—apple and cabbage strudel—probably Bratwurst in the evening—tomorrow black pudding and liver sausage—madness.”

The same postcard indicates that he did not enjoy travel in winter to remote locations, and his tone suggests that he did not go willingly but owed the attention to his patrons: “Yesterday nine hours on the train—three hours in an (open) car... Arrival at 8:00 in the evening... Late to bed.” Klimt knew that there was some purpose in the maintenance of his contacts with Otto and Eugenia Primavesi. The previous December, Eugenia had admired a picture in his studio and Otto had arrived in Moravia that Christmas Eve of 1914, the first the family spent at Winkelsdorf, bearing Klimt’s Hope II (Figure 17), apparently as a gift. The painting, which was then called Vision, was begun as early as 1907 and first exhibited in 1909; it was shown in 1910, 1913, and at Prague in 1914, still unsold. Hoffmann suggested that Eugenia hang the picture, which she would later describe as her favorite Klimt, over the desk in her study at Olmütz.

While there does not seem to be a record of Schwindlfest celebrations in 1916, Klimt spent a night with the Primavesi in May that year, probably in Olmütz, when he delivered a landscape titled Litzlbergerkeller on the Attersee (private collection). The picture had been the subject of correspondence of April 26 and May 3 from the artist to Otto. In the first letter he asked a sale price of 8,000 Kronen and promised that it would be finished in the latter half of May, and in the second he mentioned that it would soon be ready but required a frame, as he had nothing suitable. Later in May, Eugenia wrote to Hoffmann: “Thursday, Klimt suddenly came and the picture as well... Friday afternoon, he left by car for Brno and from there by train to Vienna.” As it was delivered before the artist’s 1916 departure for Weissenbach on the Attersee, the view of the Litzlbergerkeller must have been begun there the previous summer. Klimt then took up the picture again to complete it when a patron was found.

Klimt was present for the Schwindlfest in January and again, together with Hoffmann and Hanak, in May of 1917. On January sixth, he wrote to Emilie Flöge that he was “worn down, squashed, crushed—afflicted with every illness and discomfort.” But he recovered somewhat and on the eighth reported his condition as “well, except for a pain in the sole of my left foot, as a result of a six-hour walk through deep snow on the feast of Epiphany.” As in previous postcards to Emilie, his reportage gives something of the flavor of the demands of country life with the Primavesi family, even if colored by the fact that his mental and physical health were then increasingly uncertain. On December 5, 1917, Hoffmann wrote to Eugenia, who wanted to buy another Klimt painting to celebrate Christmas, that he would suggest the Blumenstück, or flower piece, that is, Garden Landscape with Hilltop (Kunsthaus Zug, Switzerland, Deposit of Foundation Collection Kamm). That summer Klimt had been anxious, unwell, and perhaps depressed also by the course of the war and had found it difficult to
work. Whether Blumenstück was begun at Attersee in 1916, or perhaps elsewhere in the summer of 1917, is not known. It was, in any event, sold unfinished and was the last purchase the Primavesi made directly from the artist. Painter, sculptor, and architect were at Winkelsdorf for the New Year, 1917/18. Six weeks later, on February 6, Klimt died.

In mid-August 1917, Klimt had painted Baby (National Gallery of Art, Washington, D.C.), showing an infant swathed in a brilliant patchwork of drapery, and dispatched the canvas to an exhibition of Austrian art that opened in Stockholm in September. Several years later, Baby joined the Primavesi collection, together with Farmhouse with Rosebushes (location unknown), one of Klimt’s earliest landscapes, datable to about 1898, and the cartoons for the Stoclet frieze, which Eugenia had so much admired on her visit to Brussels in 1914. The paintings came into her sole possession upon the death of her husband in 1926 but, with the exception of her portrait, she retained them only briefly.

Máda’s portrait was completed immediately before her tenth birthday and a little more than four years before Klimt’s death. Máda died eighty-seven years later, on May 25, 2000, outliving by decades all his other sitters and the members of his circle. She remembered Hoffmann with respect and Hanak with fondness, and, while observing the rising tide of interest in Klimt, wondered how his portrait of her could have become an object of such fascination.

ACKNOWLEDGMENTS

In June 1977, John Brealey and I visited the Österreichische Galerie Belvedere in Vienna to see the Klimts, an occasion I remember vividly. John particularly admired the portrait of Sonja Knips. It gives me pleasure to credit my friend Marian Schott with having introduced me to Klimt and to thank Máda Primavesi’s nephews Christian and Kajetan for their help. I would not have met the subject of this article in the first place had it not been for my colleague Bob Bethea.

ABBREVIATIONS

Fischer 1987

Fischer 1992
Wolfgang Georg Fischer, with Dorothea McEwan. *Gustav Klimt & Emilie Flöge: An Artist and His Muse."

Grassegger and Krug 1997
Novotny and Dobai 1968
Sekler 1985
Steiner 1969
Strobl 1980–89

NOTES

1. The paragraphs on Hanak are based largely on Grassegger and Krug 1997, with particular reference to the chapter by Pavel Zatloukal, “Anton Hanak und die Mäzenatenfamilie Primavesi: Zu den Werken für die bedeutendsten Förderer Anton Hanaks,” pp. 112–30. Of great interest also is Steiner 1969. The author was the daughter of Ida Primavesi Steiner, the niece of Otto and Eugenia Primavesi, and a contemporary of the couple’s son, Otto. The primary source for Hoffmann is Sekler 1985, and for Klimt, Novotny and Dobai 1968. For a summary of Otto and Eugenia’s role as patrons of Klimt, see Tobias G. Natter, *Die Welt von Klimt, Schiele und Kokoschka* (Cologne, 2003), pp. 72–86.

2. For the purposes of this article, Eugenia Primavesi is referred to by her given name, despite the fact that she too was called Máda, so as to distinguish between mother and daughter.

3. When she first made herself known to the Museum, Máda Primavesi owned the portrait of her mother. She and her younger sister Litta had received it as a bequest, and Litta had exchanged her share for their mother’s pearls. Miss Primavesi came to the Museum several times in May 1987, when the portrait was sold at Sotheby’s, and I visited her in Montreal (September 14 and 18, 1993, and October 12 and 13, 1994).

4. Steiner 1969, p. 28, and see also p. XV, no. 6, and Zatloukal in Grassegger and Krug 1997, pp. 112–14, fig. 150. For a photograph of the plaster, see Grassegger and Krug 1997, fig. 58.

5. The names and birth dates of the Primavesi children appear on the reverse of *Mother and Four Children, a gift bronze statuette that Hanak made for Otto and Eugenia Primavesi in 1916 (Zatloukal in Grassegger and Krug 1997, figs. 180, 181).*


7. This according to Máda Primavesi, who remembered many trips from Olmütz to Vienna to sit for Klimt.

8. Steiner 1969, pp. 36, XV, no. 9, and Zatloukal in Grassegger
and Krug 1997, pp. 115–f. 154, 155, 116. According to Zatloukal, p. 115, the sculpture was intended for the “Aussenraum,” whereas Steiner, p. 15, notes that it was “für die Fassade . . . in Höhe dei Stockwerkze.”


13. For Hoffmann’s pavilion, see Sekler 1985, pp. 143–49, fgs. 185–89, 358–40, cat. 141, illus. cat. 141/1–III. Figure 187 shows several of Hanak’s pieces and others may be seen in Grassegger and Krug 1997, fig. 92.

14. Sekler 1985, fgs. 188, 189, illustrates a view looking into the Klimt gallery and another showing a case for the display of decorative arts. In the Klimt gallery are Jurisprudence, Margaret Stonborough-Wittgenstein, and Park, for which see Novotny and Dobai 1968, pp. 329–30, no. 128, illus., 337–37, no. 142, illus., no. 165, ill.

15. For the house, which Sekler assigns to 1900–1901, see Sekler 1985, pp. 269–70, cat. 54, and ill. cat. 54/VI, showing Klimt’s portrait in situ. Novotny and Dobai 1968, pp. 324–25, no. 123, ill., date the portrait 1901–2; it was exhibited at the Secession in February 1902. Hofmann also created the installation for the April 1902 Secession show, which featured Klimt’s Beethoven frieze (Sekler 1985, pp. 275–76, ill. cat. 64/1, and Novotny and Dobai 1968, pp. 326–29, no. 127, ill., illus.). About 1904–5, Hofmann designed seat furniture and cabinets for the painter’s studio (Sekler 1985, p. 292, cat. 96). For illustrations, see Fischer 1987, pp. 33–34, fgs. 28, 29.

16. See the chronology in Grassegger and Krug 1997, p. 336. The purpose of the couple’s visit must have been to meet Hanak and see the Austrian pavilion, although the trip does not seem to be documented.

17. See Novotny and Dobai 1968, pp. 344–45, no. 154, ill., among others; Sekler 1985, p. 345, no. 153, ill.; and Grassegger and Krug 1997, fig. 120.


19. This message, from a postcard Klimt sent to Emilie Flöge, is among many quoted in Fischer 1987, p. 182, no. 278.


24. Ibid., p. 157, and see also p. 370. After the sale of Villa Skywa-Primavesi in 1929 (subsequent to Robert’s death in 1928), the interiors were adapted and partly refurnished. Damaged in World War II, the house was last remodeled in the 1970s. Little of the original furniture survives (see ibid., p. 166, fgs. 216). It seems that small objects assigned to the Skywa-Primavesi years, for example those decorated with a combination of geometric and organic motifs, cannot be specifically associated with the house even though they are similar in style. See Gabriele Fahn-Becker, Wiener Werkstätte, 1903–1932 (Cologne, 1995), pp. 72–83, illus., especially those on pp. 75–78.


27. See Fischer 1992, p. 157, no. 234, a postcard of May 18, 1914, to Emilie Flöge in Vienna.


29. See notes 23, 24 above.


31. For Austria House, see Sekler 1985, pp. 159–62, fgs. 207–9, 362–64, cat. 182, illus. 182/1–III, and for the Cologne exhibition, pp. 562–64, cat. 182, illus. 182/1–V.


35. Sekler 1985, p. 97, fig. 117, and Völker, Textiles, p. 18, fig. 24. Hochwald is thought to be one of the earliest fabrics.

36. “Ein Landhaus in Winkelzöldorf bei Mährisch-Schönberg,” Deutsche Kunst und Dekoration 38 (June 1916), pp. 198–211, esp. pp. 204, 210, 211, and illustrations on pp. 212–24, the most complete set of views of the exterior (2) and interior (25). The translation of the quotation is after Fahr-Behler, Wiener Werkstätte, pp. 84–85.

37. Sekler 1985, p. 132.

38. Ibid., according to Mäda Primavesi as quoted by Sekler.

39. Ibid.

40. For the complete German text, see Steiner 1969, pp. 243–44.


42. Steiner 1969, p. 244, reports that Eugenia assigned her portrait to the period during which the house at Winkelzöldorf was built. This was principally 1913–4, rather than 1915–1915.

43. For the full German text, see Fischer 1987, p. 182, no. 284.

44. Quoted in German in Steiner 1969, p. 243, and in English in Natter and Frodl, Klimt’s Women, p. 128.

45. For the complete German text, see Steiner 1969, pp. 243–44.
p. 144, fig. 357 (the illustration, misidentified as a view of the 1911 Rome International Exhibition, shows that of 1914).
47. See Novotny and Dobai 1968, pp. 354-55, no. 177, ill., pl. 79 (color), for the second portrait, of Adele Bloch-Bauer.
48. See note 41 above.
50. The many drawings of the head of Friederike Maria Beer for her 1916 portrait are perhaps an exception. See Strobl 1980-89, vol. 3, pp. 106-7, nos. 2552-61, ill.
51. Ibid., vol. 2, pp. 272-81, nos. 2113-17a, 2118-40,ills., and vol. 4, pp. 174-75, nos. 3650-46, ills. Number 3642 must represent Mada bored or tired, as the artist would not have posed the subject of a commissioned portrait in this way. It is often remarked that when painting her, he had Whistler and Velázquez in mind, but the drawings do not provide evidence of this. Kliment was not without experience of children. Early in his career, he had painted and drawn the children of family and friends with empathy and discernment. See, for example, Novotny and Dobai 1968, pp. 281, no. 17, ill., 284, no. 27, ill., 301, no. 76, ill., 307, no. 92, ill., and Strobl 1980-89, vol. 1, pp. 40-41, no. 98, ill., 52-53, nos. 134, 135, ills., 120, no. 369, ill. The last of these was formerly in the Primavesi collection.
52. See Fischer 1987, p. 34, fig. 30.
54. The last of the studies was sold in 1997.
57. Strobl 1980-89, vol. 2, pp. 286-90, ills., after Emil Pirchan, Gustav Kliment: Ein Künstler aus Wien (Vienna 1942), and then in the collection of Emilie Flöge, and Nebehay, Gustav Kliment, pp. 16-18, fig. 10. The notebook was later destroyed.
59. Ibid., vol. 2, pp. 248-49, 253-55, nos. 2028-29, and see also p. 274, no. 2030, ill.
62. For excerpts from Hanak’s letters of November 15 and 21 and for Hoffmann’s of December 5, 1914, see Steiner 1969, pp. 244-45.
63. The passage about travel continues with the first line from Wagner’s Tristan und Isolde ("Frisch weht der Wind der Heimat zu"). For the German text, see Fischer 1987, pp. 185-86, no. 341, and for a partial English translation, Fischer 1990, p. 159.
64. A letter from Eugenia to Hanak, January 1, 1915, for which see Steiner 1969, p. 245.
65. Novotny and Dobai 1968, p. 345, no. 155, ill.
66. Hoffmann commented on January 7 that the subject was perhaps not suited to a country house, for which see Steiner 1969, p. 245.
68. The subject of the picture is not in fact recorded in the correspondence, for which see Steiner 1969, p. 246.
69. Ibid., p. 247.
71. Novotny and Dobai 1968, p. 373, nos. 216, ill., colorpl. 109, and Collins, Gustav Kliment, pp. 132-33, no. 32, colorpl., who assumes the picture was still in Kliment’s studio at his death.
72. Novotny and Dobai 1968, pp. 375, no. 221, ill.; Ursula Fraefel in Strobl 1980-89, vol. 2, pp. 189-95, nos. 1810-18, colorpls. Baby was bought in 1919 at the Kliment estate sale, while the cartoons, also from Nebehay, were acquired in 1920; see Natter, Die Welt von Kliment, Scénes et Kokochara, p. 85. According to Emil Pirchan, Gustav Kliment (Vienna, 1956), fig. 119, a beautiful drawing of a child in profile, an 1898 study for a cover for Ver Sacrum, had belonged to “M. Primavesi.”
73. According to Mada, all of the pictures except the portrait of her mother were given over to Hugo Bernatzik for safekeeping. By June 1928, they were probably for sale. Baby, no. 72 in the 1928 exhibition at the Vienna Secession, was so marked, as were no. 49, which must be Hope II; nos. 46 and 57, both titled Atersee, one or the other of which is probably the Litzlbergerkeller at the Atersee; and no. 65, Parklandschaft, which may be Blumenstuck. I cannot identify Farmhouse with Rosebushes. Either it was not included, or conceivably it could have been no. 40, Durchblick, or no. 44, Landschaft.

EX COLLECTIONS

Mr. and Mrs. Otto Primavesi (1913–his d. 1926); Mrs. Otto Primavesi (from 1926); Hugo Bernatzik, Vienna (in 1928; sold or consigned to Neue Galerie); [New Galerie, Vienna, from 1928; sold to Mrs. Steiner]; Jenny Pulitzer Steiner, Vienna and New York (by 1937-d. 1958; seized by the Nazis; inv., 1938, as Mädchendieb; in the Historisches Museum der Stadt Wien, 1941; restituted, 1951); her daughter and son-in-law, Mr. and Mrs. André Mertens (1958–63); Mrs. Mertens (1963–64), the donor retaining a life interest, which terminated at her death in 1985.
EXHIBITIONS

Rome. Palazzo dell’Esposizione. “Seconda esposizione internazionale d’arte ‘della secessione,’” February–June 1914, room 4, no. 12 (as Ritratto di fanciulla) [only work by Klimt exhibited].

Berlin. “Bundes österreichischer Künstler,” 1916 [one of three works by Klimt exhibited].


New York. Galerie St. Etienne. “Gustav Klimt,” April 1959, ill. (as Portrait of Maeda Primavesi, the list of lenders including Mr. and Mrs. André Mertens).


ADDITIONAL REFERENCES


EXCERPTS

Adapted from the unpublished memoirs (1948) of Mäda Primavesi*

The town, Olmütz, had been a fortress, and our house and enclosed garden were built on its medieval walls. Below, the muddy river March flowed through a wild park, and beyond was the wide Moravian plain, where the sun rose in the morning. Halfway down the wall of the fortress was a little park and in it lived our deer. Gracefully the animal moved about and looked at me with soft eyes when I came to visit.

How I loved the garden, full of secrets and fascinating things. In the midst of lilac, laburnum, and jasmine bushes stood four Baroque figures made of sandstone. I was told they represented the four seasons. Beside a young birch tree there was a fountain. A small, golden, smiling bronze boy stood on a marble pillar. Beneath him were four heads, one on each side, with twisted, miserable faces. I was told that the boy was called the Child Above Everyday Life, and that the heads stood for envy, greed, rage, and lust, but I did not understand what all of this meant. Water issuing from the mouths of four bronze snakes wound around the heads and flowed into a marble basin at the base. I often stood in front of these faces, watching them and thinking about them. Nearby was a shady arcade of vines with big, heart-shaped leaves and pipe-flowers, quince bushes, and almond trees with pink fluffy blossoms.
Beside our house stood a very old armory. We could hear the soldiers sing, especially when they went out to the drill ground at six in the morning and when they came back at noon. Mostly they sang Moravian, Bohemian, and Slovak songs, full of rhythm and emotion. There was a place in the garden, near the birch tree and next to an old tower overgrown with white, pink, and red roses, from which one could see the square in front of the armory. On Sunday afternoon our maids, wearing immaculate white cotton aprons, sat there together making endless crocheted lace for their dowries and now and then catching glimpses of the soldiers. The tower had enormously thick walls, and inside was almost completely dark, with rough heavy furniture, a tile stove, and an old gold and white wooden angel hanging from the ceiling. The walls were so thick that I could lie down on the wide windowsill and look down at the young priests from the novitiate of Old Saint Michael’s, dressed in black with purple sashes, walking under the trees in their shady garden below.

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On the twenty-second of December, a cold morning. I woke early and saw my older sister, Lola, in a white nightgown with her dark hair flowing, her back turned: we shared a room and she was preparing a surprise for my birthday. When I woke again it was pale gray daylight. Hanging around my bed and over my head were garlands made of the loveliest candies one can imagine, all the sweets I liked best: sugared pineapple slices, bright yellow and transparent; chocolate dates; and cherries with chocolate coatings from which the sweet juice dripped in heavy pink droplets. I had only to reach out and select what tempted me. It was like a fairy tale country with streams of cream and honey. I dressed quickly, but with care, in honor of my birthday, and went downstairs, looking into my father’s study, my mother’s blue salon, and out over the snow-covered terrace and garden, waiting for my parents.

Later my mother asked me what I would like for my birthday dinner. After some thought, I ordered bouillon with little bacon dumplings, roast beef with mushrooms and green peas, fried potatoes, and a cake with chocolate icing, whipped cream, and candied fruit. In the kitchen the maids were breakfasting, crumbling their white buns into dishes of hot coffee with foaming milk. My mother took a key and opened the pantry door for Fanny, the cook. Standing in immaculate rows were homemade preserves, jars of raisins and hazelnuts, containers of eggs and flour. We went to the basement, and passing the carpet cellar, which smelled strongly of naphtha, entered the fruit cellar, where we selected yellow wax apples, dark red ones, oranges, and tangerines. Finally we visited the black-tarred wine cellar with its bottles of Chianti, Liebfraumilch, and Tokay. In the laundry there was much hustle and bustle under clouds of steam and the peculiar noises made by the electric washing and ironing machines, while nearby was the room of our seamstress, Frau Dissil, who was waiting to hem a dress for me that had come from Vienna.

***

In fine weather we visited Drostein, the country house that had belonged to my grandparents. Outside the gate there was a pond with hundreds of geese, ducks, and swans. If the day was hot, the workhorses were driven into the pond to cool off as well, and children splashed and shouted among the gabbling waterfowl. The house was white, with green shutters overgrown with grapevines. There was a wide yard with a long-handled pump, a flower garden, and an orchard of cherry, apricot, peach, apple, pear, and plum trees. My favorites were the cherry trees, and at night I dreamt of their sweet, spicy fruit. A deep tunnel into the earth led to the wine cellar where, in the candlelight, we saw black beetles and spiders rushing about and bats clapping their wings and tumbling toward us. A path led to a yellow church with two onion-shaped steeples on the holy mountain. Czech folk made pilgrimages to the church, the women wearing embroidered dresses, red kerchiefs, and high black boots. Some visitors, in fulfillment of a vow, climbed up to the church on their knees, which seemed very strange to me. Behind the church were booths where everybody bought pictures of the saints, rosaries, and prayer books, to be blessed by the priests, as well as primitive toys and hearts made of cake with sugar icing.

***

“They are coming! Do you hear the sled bells?” I called to my younger sister, Litta, as together we ran downstairs. We had been rather lonely staying for a few weeks without our parents in our country house in northern Moravia. Barefoot on the soft carpet, we ran down to the hall, a large room but not very high. The walls and all the furniture of our new mountain house were hand-carved and colorfully painted. We heard laughter and many voices and the noise of snow being knocked from boots. A dozen guests entered, together with our parents. Of these there were three who interested us most: Anton Hanak, Gustav Klimt, and Josef Hoffmann, who had designed the house. They were very different from other people and also very different from each other. It was as if one watched a circus, I thought, but at the same time there was something mysterious about them. Hanak knew best, as he often stayed with us in Olmütz for weeks at a time. He had made the figure of Eternity for the family grave,
the Child Above Everyday Life, and also my mother’s portrait. What we children liked about him was that he told us endless stories. He was the son of poor Moravian peasants who had wanted him to become a priest, but when he was fourteen he ran away to Vienna, with an urgent but vague desire to accomplish something great. At first he worked as an apprentice to a drunken shoemaker. He showed us how he had begged for alms: bowing down, he held out his hat and said in a meek voice, “Ein armer reisender Handwerksbursch bittet um eine kleine Unterstützung—A poor traveling handicraft boy begs for a little assistance.” He was short but very broad-shouldered, with long heavy arms and big hands, and he told us that he would have grown to be a tall man if he had had enough to eat as a youth. He sang beautifully to the music of his guitar in a soft voice, mostly very old folk songs of different countries. We particularly liked the Italian songs, though we couldn’t understand them.

The next morning my sisters and I found on the radiator in the passage, in front of our three rooms, some exquisite tiny Japanese figures. Professor Hoffmann always brought us surprises of the kind. A quiet, shy man, clad in gray, black, and white, with a short dark moustache and his eyes hidden behind glasses, he was not as close to us children as Professor Hanak. Still, we sensed Hoffmann’s dynamic power and, whenever he came out of his shell, he had a lovely sense of humor and showed great kindness.

About ten in the morning the guests had their breakfast. Besides cold chicken, caviar, pâté de foie gras and pâté de lapin, preserves and honey, braided Striezel and other kinds of bread, each guest had his own favorite dish: the juice of dried plums, smoked ham or smoked eel, an unusual kind of cereal. (My mother kept a little book in which she wrote down the favorite dishes of every guest, as well as the flowers they preferred, and if they would rather sleep on three big feather pillows or on a single small pillow of horsehair.) Afterwards we all went in our many-colored winter outfits, with toboggans and skis, to the mountains. We returned only when it grew dark, everybody ravenously hungry. In the souterrain an enormous table was laid and a whole roast pig was carried in, with cooked boiled pork, fresh sausages, beer, lots of wine, liqueurs, cognacs, and nut and poppy-seed cake. The hall resounded with laughter and song. Instead of wearing stiff black dinner jackets, my father and the men among the guests were in the loose, hand-printed silk gowns my parents provided, while the women wore evening dresses.

Gustav Klimt, the painter, a powerfully built man, looked like a mix of a bear and an apostle. His hands and his gray eyes were extraordinarily sensitive. He had painted my portrait in his low-built white house in Heitzing in the suburbs of Vienna. The white rooms were still, and his beautiful vivid pictures and Chinese costumes gave them a mysterious life. I had a special link with him. Professor Hoffmann always teased me and said I should be sent to boarding school, while Professor Hanak chuckled and said I was a “drama.” But when Klimt looked at me with his very observing eyes, I felt that he admired me not as a little girl but somehow seriously, as if I were already a little woman.

All of these guests—artists, relatives, politicians, aristocrats, and so forth—were entertained with the same hospitable largesse. They stayed for one week or for six weeks, as they liked. If they had any ailment, or if my mother thought they needed looking after, which was usually the case with the artists, who worked so intensively, the chief doctor from a sanitarium nearby came and prescribed some sort of cure. My mother usually had a married couple of trained masseurs available as well. While some of the guests were poor and some were wealthy, all had a genuine liking for each other. At night they settled down in the living room to talk about art, culture, and philosophy, about the old Austria and the new, tradition and reform. My parents felt it to be their particular duty to help struggling artists working in the new, honest style, and for many years my father financed the Wiener Werkstätte.

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One year a flood disrupted the lovely little valley in Winkelsdorf and our grounds, through which a brook ran. The next year our house burned to its foundations. And then my father died. We lost our fortune. At first I was stunned and could not quite believe it. I fell ill and had to spend four months in bed. When I got up again everything was so new, so different. To earn money—what an adventure! Even though—or perhaps just because—I was so little prepared.

*The manuscript, which was written in English, was adapted with the permission of the author’s nephew Christian Primavesi.
Lost Paintings beneath Picasso’s *La Coiffure*

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The Metropolitan Museum of Art is fortunate in its Picasso holdings. The collection includes examples from all periods of the artist’s oeuvre and is particularly strong in works executed between the Rose Period and the Cubist era. The changes seen in Picasso’s work during this transitional stage, dating from early 1906 to mid-1907, have been attributed to the influence of Greek and Iberian sculpture, both of which he had seen at the Louvre, as well as that of Catalan art and El Greco’s paintings. They were, however, rooted to an amazing degree in a ten-week stay, starting in early June 1906, in the Spanish village of Gósol. Picasso had left Paris with his mistress to vacation there. Back in his beloved Spain, no longer distracted by his active Parisian social life, he found himself in a remote place of stark beauty and intense light, where even the austere dress of the villagers would inspire him. The isolation of Gósol produced a state of mind that allowed him to draw freely from these many sources. His palette changed to reflect the light and the ochre and gray colors of the landscape. He disrupted the unity and harmony that characterized his earlier style by introducing bold distortions and simplifications into otherwise realistic paintings. His figures gained weight and presence, and he did not hesitate to depict awkward or clumsy forms. The inner tension created by this new combination of realistic depiction with distortion and abstraction resulted in paintings that have been described by Pierre Daix as embodying the “dynamics of deformation.”¹

Among the seven paintings and drawings from this period that can be said to exhibit the dynamics of deformation is *La Coiffure* (Figure 1, Colorplate 18). The date of execution of *La Coiffure* has been disputed: according to Picasso, it was painted in 1905, but Daix and Alfred H. Barr Jr. place it in 1906 on stylistic grounds.² Also in question is whether *La Coiffure*, like the Portrait of Gertrude Stein (The Metropolitan Museum of Art, New York, Bequest of Gertrude Stein, 1946.47.106), was carried out in two or more phases. In an attempt to shed light on this last point, *La Coiffure* was X-rayed in 1997. The results (Figure 2) were so informative that the initial question became just one of many issues. The X-radiograph shows that underneath *La Coiffure* there are at least three seemingly finished paintings, all very ambitious. Also revealed is the beginning of a fourth painting, as well as certain forms that remain unidentified. In addition, the X-radiograph tells us that after he finished working on these paintings, Picasso turned his canvas 180 degrees to paint *La Coiffure*.

Picasso often painted over his own compositions. Once he had achieved financial success, he did this to exploit pictorial ideas generated by the original composition. But during his earlier career, from 1902 to 1906, when he worked on this canvas, this practice was most likely dictated by a need for economy. The support of *La Coiffure*, measuring 174.9 by 99.7 centimeters, was an expensive piece of linen that Picasso surely would have reused if he believed his painting was unsatisfactory or if he simply wished to develop a new composition.

The earliest painting uncovered by the X-radiograph shows a Blue Period man and a female child, a composition whose power owes much to the use of a full-length portrait format and the close proximity of the figures. The clarity of the image of the man, dressed in a white long-sleeved shirt and a vest, hands extended in offering, suggests that the picture came close to completion. This man relates to a number of drawings executed in 1902, and in format and placement both figures correspond closely to a drawing made that year in Barcelona titled *Interior of the Artist’s Studio* (Figures 3, 4). In fact, the correspondence is so close that this must be a preparatory sketch for the painting. The image of the child in the painting is not as legible as that of the man; however, one bare foot appears in the lower left corner of the X-radiograph, an oval can be seen where her head would be, and an irregular shape above her foot resembles a ruffle in *Interior of the Artist’s Studio*. Another preparatory drawing, *The Folio* (Figure 5),

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The notes for this article begin on page 161.
Figure 1. Pablo Picasso (Spanish, 1881–1973). *La Coiffure*, 1906. Oil on canvas, 174.9 x 99.7 cm. The Metropolitan Museum of Art, Catharine Lorillard Wolfe Collection, Wolfe Fund, 1951; acquired from The Museum of Modern Art, New York, anonymous gift (55.1.40.5) (photo: © 2004 Estate of Pablo Picasso/ARS, New York). See also Colorplate 18
Figure 2. X-radiograph of *La Coiffure* turned 180 degrees
Figure 3. Pablo Picasso. *Interior of the Artist’s Studio*, Barcelona, 1902. Pen and ink on paper, 15 x 12.2 cm. Museu Picasso, Barcelona (photo: AHC-ARNIU Fotografic, Barcelona. © 2004 Estate of Pablo Picasso/ARS, New York)

Figure 4. X-radiograph with outlines of *Interior of the Artist’s Studio*

Figure 5. Pablo Picasso. *The Folin*, Paris, 1902. Drawing, 29.7 x 23.8 cm. Whereabouts unknown (photo: © 2004 Estate of Pablo Picasso/ARS, New York)
depicts a single figure, a man whose face, clothing, and stance are similar to those of the man in the X-radiograph. Moreover, in the top right corner of The Folió there is a drawing in which Picasso tried out a composition with a man and a young girl. In a third drawing, The Offering (Figure 6), the compression and tension evident in the painting give way to a more open space with the figures placed farther apart. By adopting a horizontal format that allowed him to increase the space between the figures and by changing the male figure into a female, Picasso would finally resolve the theme treated in these works in the painting La Soupe (Figure 7).

Picasso was in Paris starting in May 1901 but had returned to Barcelona in January of 1902. It seems likely that he executed the earliest painting revealed in the X-radiograph in Barcelona between January and October of 1902. In October of 1902 Picasso again went to Paris, remaining there until January of 1903, a stay filled with uncertainty; he did not know where he would live and whether he could support himself. It is unlikely, therefore, that he would have taken this large painting with him.

Another painting discernible in the X-radiograph was described in the summer of 1904 by Fernande Olivier upon her first visit to Picasso’s studio in the Bateau Lavoir, where he had taken up residence in April of that year: “One painting particularly struck me—I think Picasso has since painted over it—of a cripple leaning on his crutch and carrying a basket of flowers on his back. The man, the background, everything in the picture, was blue, except the flowers which were painted in fresh, brilliant colors.” This painting was preceded by two drawings. The one illustrated here, Beggar with a Crutch (Figure 8), is closest to the painting, although the basket contains no flowers. The figure is quite clear in the X-radiograph: his feet, legs, hips, staff, and left arm, as well as his basket are all easily legible, and even the ragged edge of his cut-off trouser is visible (Figure 9). The face, however, is obscured by the density of the lead-white pigment used in the face of the man in the first Blue Period picture, and only a hint of eyebrow and nose can be seen. When Picasso left Barcelona for Paris again in April of 1904, he had the promise of a studio in advance and would have been able to ship all the works he valued to that city. This large canvas was presumably among them. Whether Beggar with a Crutch was already painted on it when it arrived at the Bateau Lavoir, or whether Picasso executed the figure in Paris is not known.

Another figure visible in the X-radiograph is based on a drawing that bears the very specific date of December 24, 1905 (Figures 10, 11). This drawing, Juggler, Sketches, and Caricatures of Apollinaire, belongs to a group of works depicting acrobats and harlequins that Picasso executed in the second half of 1905. The figure in the X-radiograph corresponds closely to the figure in the drawing, except for the right leg, whose placement is unclear. The stance of the juggler in the
painting is similar to that of the man in *Beggar with a Crutch*, providing an example of Picasso’s ingenious use of an earlier composition, a kind of economy seen throughout his oeuvre. In this context, it should be noted that a version of the juggler at the top right corner of the drawing shows the left arm in a position that echoes the position of the beggar’s left arm. The juggler in the drawing does not wear a ruff, although there seems to be some lace-like material to the right of the neck. However, the X-radiograph of the painting shows a shape much like that of the ruffs used in paintings of the group to which the drawing belongs. A similarly shaped but less delicate collar appears, for example, in *Harlequin in Profile* (Figure 12).

Whereas Fernande Olivier provided information about the colors of the *Beggar with a Crutch*, we have no record of the painting of the juggler. However, related paintings tend toward the pinks and pale blues of the late Rose Period. Through microscopic examination we can see two different tones of red: one deep and dark, the other a bronze color with a red tint. A pigment sample taken from what would be the background of the figure reveals a rich red painted wet into wet on a pale blue color. Areas in the figure itself are close to the bronze color visible under the microscope.

There is not much material indicating the existence of a fourth painting. Nevertheless, there is a fragment that is quite arresting and which, I believe, may represent the beginning of a composition that Picasso undertook in Gósol and completed there. The fragment shows part of a head that is very close to *Head of a Boy* (Figures 13, 14), a drawing dated 1905 by the artist. *Head of a Boy* initiated a subject that would occupy Picasso from late 1905 to the summer of 1906: the theme of two brothers, explored in numerous drawings and a gouache, which show an older boy carrying a younger one on his back. All of these works are vertical in format, emphasizing the height of the older

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Figure 8. Pablo Picasso. *Beggar with a Crutch*, Barcelona or Paris, 1904. Pen and wash on paper, 36 x 24.8 cm. Private collection (photo: © 2004 Estate of Pablo Picasso/ARS, New York)

Figure 9. X-radiograph of *La Coiffure* with outlines of *Beggar with a Crutch*
Figure 10. Pablo Picasso, Juggler, Sketches, and Caricatures of Apollinaire, Paris, December 24, 1905. India ink on paper, 17.6 x 13.3 cm. Musée Picasso, Paris (photo: Daniel Arnaudet; Réunion des Musées Nationaux/Art Resource, N.Y. © 2004 Estate of Pablo Picasso/ARS, New York)

Figure 11. X-radiograph of La Coiffure with outlines of the juggler from Juggler, Sketches, and Caricatures of Apollinaire

brother. The culminating example of this series is Two Brothers (Figure 15), painted in Gósol, in which the head of the older brother is virtually identical to the subject of the drawn Head of a Boy. The older boy in Two Brothers is painted very realistically and with great delicacy. The younger boy’s face, by contrast, is rendered boldly and appears abstract and masklike, creating a dichotomy that epitomizes the dynamics of deformation. Although a number of the studies for Two Brothers depict the older brother in a pose similar to that of the beggar and the juggler, the X-radiograph offers no convincing visual proof that Picasso painted anything more than the head on this canvas.

I would like to speculate about what Picasso painted between January of 1906—when I believe he executed the Juggler—and the fall of the same year—when he produced La Coiffure. As he had finished the drawing of the Juggler at the end of 1905, he would probably have made the painted version of this image in January or February of 1906. Then, I propose, he began a painting on the theme of two brothers. As we know, Picasso left Paris for Barcelona in May of 1906 and arrived in Gósol in early June. It is unlikely that the canvas on which La Coiffure would eventually be painted would have traveled to Gósol. With three or four layers of paintings, it would have been rather stiff and not easily rolled; certainly it would have been difficult to bring to the village by mule, the only means of transport for the last leg of the journey. In Gósol Picasso continued to pursue the two brothers theme: according to Josep Palau i Fabre, a variation on it, a gouache titled Two Brothers, was the first work Picasso produced in that village.⁹

When Picasso returned to Paris after his stay in Gósol, he was faced with this large canvas bearing the beginning of Two Brothers. As has been noted, it was not his custom to paint out his earlier compositions; rather, he preferred to keep them and use them for


Figure 17. Pablo Picasso. *The Coiffure*, 1906. Pen and ink on paper. Whereabouts unknown (photo: © 2004 Estate of Pablo Picasso/ARS, New York)
his new work. But this canvas by now had a long history and had sustained many major changes. And so, in order to avoid the distraction of those earlier efforts, he turned it upside down. Then he began *La Coiffure*, with one woman combing another woman’s hair. This subject had first engaged him in early 1905 as part of the circus theme that would occupy him for the entire year. His interest in the coiffure motif grew during a trip to Holland in mid-1905 and continued well into 1906, as demonstrated by numerous studies in ink, crayon, and watercolor. Those most closely related to *La Coiffure* (for example, Figures 16, 17) are all quite realistic and most likely were made before Picasso left for Gósol. *La Coiffure* was painted with speed and directness, as if all the previous studies and the new freedom achieved in Gósol had come together in an explosion. The women’s poses remain similar to those worked out in the studies. But a boy makes his first appearance in a composition on this theme: he derives from the younger brother in the *Two Brothers*, although he is slightly larger than that figure.

Daix, acknowledging the Gósol influence on *La Coiffure*, seen in its simplified forms and abstract faces, speculates that it was perhaps carried out in two phases, one before the sojourn in Gósol and one after it, in much the same way *Gertrude Stein* was painted. However, the X-radiograph shows only one version of the painting (Figure 18). This finding was confirmed by microscopic examination that uncovered only one change, a repositioning of the neck of the standing figure, clearly effected during the initial laying in of the form. Microscopic examination further revealed that the paint film consists of multiple, relatively thin layers with colors from earlier compositions frequently showing through to the top. Characteristically, Picasso used colors from the painting directly beneath *La Coiffure*, incorporating the dark red of the juggler in the standing woman’s skirt and allowing the bronze tone to outline the hands and the mirror of the seated female figure. This same bronze lies under the black strokes that delineate the standing woman’s eyes. In certain areas, particularly the skirt of the seated woman, the paint is applied with great rapidity, creating bubbles in the film. Indeed, everything about the execution points to speed and sureness. Because the handling is very similar to that of *Gertrude Stein*, which was finished soon after the artist returned from Gósol, in August of 1906, I propose that *La Coiffure* was painted in late August or September of the same year.

To provide additional proof that *Beggar with a Crutch* lies under *La Coiffure*, a cross section was taken where the flowers would be. We know from Fernande Olivier’s description that *Beggar with a Crutch* was
entirely blue except for the brilliantly colored flowers. Accordingly, in the interest of taking a single sample, a search for any color other than blue was undertaken. White was found, a likely element in a “brilliant” area, in a position that would correspond to the top layer of the second Blue Period painting. In addition, an impressive array of other colors appeared in the sample (Figure 19, Colorplate 19). In fact, the sample offers a chromatic summary of Picasso’s styles of the Blue Period, the Rose Period, and the Gósol and post-Gósol periods. Most surprising, however, is the fact that the cross section accounts not only for the two Blue Period paintings and shows the white on top of the second Blue Period picture, but also contains another Prussian blue section, by far the widest layer. This indicates the presence of a third Blue Period painting or one executed during the transition between the Blue Period and the Rose Period. The sequence of layers in

the cross section suggests that this painting was executed between the summer of 1904 and the summer of 1905; it must be one of the numerous blue pictures Picasso worked on until the middle of 1905. I have indicated on the X-radiograph (Figure 20) some of the more suggestive elements that do not relate to any of the paintings previously discussed in the hope that a reader will be able to relate them to a known work.

It is fortunate that Picasso rarely scraped or painted out discarded compositions, for the evidence left behind confirms that a number of important drawings were realized in painted form. In the case of La Coiffure his practice has also left us a remarkable record of his changing styles and interests. Through the shadow imagery of X-radiography we have been given a glimpse of the paintings hidden beneath La Coiffure.

ACKNOWLEDGMENTS

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NOTES

4. Quoted in ibid., p. 299. Richardson makes the connection between Olivier’s description and this drawing.
5. Ibid., p. 295.
The Gulbenkian Torso of King Pedubaste: Investigations into Egyptian Large Bronze Statuaries

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Among the artworks exhibited in the 1999–2000 exhibition “‘Only the Best’: Masterpieces of the Calouste Gulbenkian Museum, Lisbon” was the richly inlaid bronze torso of King Pedubaste (ca. 818–793 B.C.) (Figures 1–3). This still-spectacular fragment is one of the great monuments of the Egyptian Third Intermediate Period, a politically decentralized and obscure era marked, nonetheless, by a high level of inventiveness and artistry in metalwork.

Close visual and technical examination of the figure at the time of the exhibition, and subsequently at the Gulbenkian Museum in Lisbon, laid the groundwork for this study, in which several points of historical, technical, and artistic interest have been pursued in depth.1 Investigation of the modern history of the statue is suggestive with regard to its origin, which in turn has further implications for the much-discussed question of the power base of the historical King Pedubaste. Technical description of the figure, incorporating insights gained from elemental, radiographic, metallographic, and petrographic analyses, contributes to a growing body of scientific studies of ancient Egyptian metal statuaries. It also provides evidence regarding casting technology and finishing processes, as well as sophisticated alloying practices and artificial patinations. The combined results of the technical and art historical studies permit at least partial reconstruction of the original and its figural decoration, along with an appraisal of the remarkable visual impact of the statue, both confirming and extending the findings of other recent studies of large Third Intermediate Period bronze statuary.

Modern History of the Bronze and Its Relation to Archaeological Provenance

The torso fragment, Gulbenkian Museum inventory number 52, comprises a section from the midstest to knee measuring twenty-seven centimeters of an elaborately decorated, costumed, and inscribed statue of King Pedubaste that was probably originally seventy-four to seventy-eight centimeters high.2 Before entering the collection of Calouste Gulbenkian (1869–1955) and thence coming to his museum in Lisbon, the statue had been in the collection of Count Grigory Sergeievich Stroganoff (1829–1910), a member of the famous Russian family of connoisseurs and collectors.3

How Stroganoff acquired the work is not recorded and cannot now be fully reconstructed, although a brief sketch of his life and collecting activities as they relate to Pedubaste and Egyptian art and archaeology, and a careful examination of the context surrounding the earliest mention of the statue, are germane. The highly cosmopolitan Stroganoff and his family traveled extensively from the early 1860s on, maintaining Rome as their winter home.4 They certainly went to Egypt in 1879–80, although the Pedubaste fragment is not included among the antiquities specifically listed as purchased on that trip, and there may well have been other visits to Egypt before that. Additionally, however, the count is known to have purchased from dealers throughout Europe.5 By 1889 the statue of Pedubaste was definitely in his possession: at least from that time, for an undetermined period, it was exhibited with the rest of his Egyptian collection by the Museumsverein in Aachen, where Stroganoff had long been a part-time resident.6 The sixty-year period from 1877 through 1882, which saw the deaths of his teenage son and wife and during which he bought the house in Rome that was to be associated with him.
Figure 1. Torso fragment of King Pedubaste (ca. 818–793 B.C.), Egypt, Dynasty 23, find spot unknown. Bronze, with precious metal inlay, h. 27 cm. Museu Calouste Gulbenkian, Lisbon, 52 (photo: B. Barrette)
and his major holdings, also seems to have been a turning point in Stroganoff’s life as a collector.\textsuperscript{7} The paintings and other antiquities for which he is best known were acquired mostly after 1880,\textsuperscript{8} and he seems to have moderated his activities as a collector of Egyptian antiquities.\textsuperscript{9} Significantly, the statue of Pedubaste is the only Egyptian artwork included among the antiquities in the select catalogue of his collection that he commissioned (Figure 4). Written by Ludwig Pollak and Antonio Muñoz, this was published in 1911–12, shortly after his death.\textsuperscript{10} Some of Stroganoff’s artworks were sold by his daughter before World War I and the Russian Revolution, others by surviving family members who reached Rome from Russia in 1921.\textsuperscript{11} The sale of the Pedubaste torso to Gulbenkian in late 1921 is probably to be associated with the second dispersal.

Émile Brugsch, then assistant to Auguste Mariette at the Boulaq Museum, Cairo (forerunner of the Egyptian Museum), wrote the catalogue prepared for the Aachen exhibition, as noted in the volume: “Der Katalog ist von Herrn Emil Brugsch in Kairo verfasst worden.”\textsuperscript{12} Pedubaste’s statue is described on page 8 under number 81 as: “Bronze torso. Vollständig mit Gold eingelegt und mit Namen des Königs Petsibast; besonders bemerkenswert durch die in dieser Form zum ersten Male vorkommende Schreibung des Names. RRR. [code in the catalogue for “most singular”].” Although the brief, bland listings in the catalogue might obscure the presence of other
important pieces, the statue appears to be the most artistically significant of the described Egyptian objects, which otherwise consist largely of “historical scarabs,” bronze gods, and small faience items. A section entitled “Terracotten und Bronzen des Grafen Gregor Stroganoff, von ihm in Aegypten 1879–1880 gesammelt” begins on page 24, and, unlike the earlier part of the catalogue, lists works from the Greco-Roman period and gives their places of purchase (mostly Alexandria, but also Zagazig, the Fayum, Upper Egypt, Tyre, and Cyprus).

While testifying to the count’s presence and purchasing activity in Egypt, the catalogue offers little information about when and where the other Egyptian objects were acquired or when Brugsch might have seen them. The form of the acknowledgment of his authorship suggests that he actually wrote in Cairo and may have seen the pieces there. Indeed, he may well have been involved in the procurement of some or all of Stroganoff’s collection. Still, in the absence of definite information, other interpretations are possible. However, Brugsch’s specific remarks in the entry on the Pedubaste statue tend to support the likelihood that he saw it in a different condition from that visible in Aachen. He comments on the unusual writing of the king’s name, presumably referring to the occurrence of “Bastet” twice, as compared to the writing used by Seheribre Pedubaste-Son-of-Bastet, who was already known to him and who wrote the sign only once for two uses. At the same time, he fails to mention the additional name that appears both in the belt cartouche and in the upper cartouche on the apron (Figure 5). If he had at any point viewed the fully cleaned statue, this would be a rather surprising omission since together the names offered was what was then an important attestation of a new royal name—an item of particular interest to Brugsch, who with Urbain Bouriant published in 1887 a listing of known kings’ names that included only Seheribre Pedubaste. Thus, it seems most likely that Brugsch saw the bronze, probably in Cairo, before it was adequately cleaned—and therefore closer to its original excavated condition. The names certainly were visible by the time Alfred Wiedemann viewed the torso on exhibition in Aachen, sometime before 1886, leading him to publish the full inscriptions and correct the attestation. Nothing in this history, then, contradicts the possibility that the statue’s uncovering in Egypt might not long antedate its appearance in the count’s collection in 1880.

Despite the fact that in these early references there was no indication of any original archaeological find spot, W. M. Flinders Petrie twice quite explicitly states in his 1905 History of Egypt that the statue comes from Tanis and uses this information as the basis for a rather specific, if erroneous, argument in his historical exposition. While the absence of documentation means that Petrie’s claim for a Tanite find spot has been widely disregarded in studies of the political development of the period, circumstantial evidence and Petrie’s reputation for character and integrity would argue that his assertion should not be discounted lightly. Moreover, there is an overlooked and much earlier reference to Pedubaste’s Tanite find spot by Gaston Maspero himself in 1887. Maspero and Petrie certainly interacted, and each was in a position to have information that descended from independent sources in Egypt. Maspero was head of the museum in Cairo from 1881, and in 1887 he issued a set of incomplete unpublished reports that he was
able to collect about the protracted excavations at Tanis, beginning with Auguste Mariette between 1860 and 1864 and continuing with reconnaissance by various deputies of Mariette, including Brugsch himself, from about 1869 to 1875. Petrie of course excavated at Tanis himself in 1883–84 and noted that he employed an old foreman who had worked with Mariette and knew much about Tanis.

**Pedubaste as a historical figure**

The subject of the torso is identified by a horizontal cartouche on the belt that contains both coronation and personal names (reading right to left) and by a titulary on the central column of the feather apron, with the names in separate cartouches (reading right to left, from top to bottom) (Figure 5; a rendering of the restored inscriptions is given in Figure 6). The former reads “Usermaatre-Chosen-of-Amun, Pedubaste-Son-of-Bastet-Beloved-of-Amun,” and the latter “King of Upper and Lower Egypt, Lord of the Two Lands, Usermaatre-Chosen-of-Amun, Son of Re, Lord of Diadems, Pedubaste-Son-of-Bastet-Beloved-of-Amun.” Inscribed monuments from the Third Intermediate Period (Dynasty 21 through Dynasty 25; ca. 1070–664 B.C.) attest to at least a twenty-three-year reign for an Usermaatre Pedubaste, and Kenneth Kitchen’s fundamental account of the period identifies this figure with the Pedubaste whom the ancient chronologist Manetho listed as the first king of Dynasty 23, who ruled for twenty-five years. On the basis of various synchronizations, this monarch has been assigned dates of ca. 818–793 B.C. Instances in which an Usermaatre Pedubaste employed an additional volitional epithet—usually Son-of-Bastet but in one case Son-of-Isis—are all ascribed to the same king. Kitchen considered Dynasty 23 a line contemporary with roughly the second half of Dynasty 22, which extended from ca. 945 to 713 B.C., and conjectured that it ruled from some northern capital outside that dynasty’s capital of Tanis, since simultaneous dynasties in one capital seemed unacceptable. The Tanite find spot given by Petrie for the statue was set aside because it appeared to be unsupported by earlier statements.

However, the Third Intermediate Period has always been understood as distinguished by the existence of more than one significant power focus, and continuing scholarly thought has only further emphasized the complexity of political organization during the period. While consensus still holds that Usermaatre Pedubaste reigned in the last decades of the ninth century, some have argued with considerable persuasive power that the Dynasty 23, with a capital somewhere in the north, to which Pedubaste and several other kings had been assigned, is a modern construct and that, judging from their predominantly Theban attestations, Pedubaste and these other kings actually constitute a secondary line of pharaohs ruling from that southern capital. These scholars suggest that Manetho’s coherent Dynasty 23 is not contemporary with Dynasty 22 but a late successor to it and that the Pedubaste of Manetho’s Dynasty 23 is another Pedubaste altogether.

While it may be appropriate to give great weight to the Theban attestations of Usermaatre Pedubaste and to consider associating him with other Theban-attested kings, these arguments have generally accepted the convenient dismissal of Petrie’s assignment of a Tanite find spot to the statue, and, in what seems a recrudescence of error, have sought to virtually nullify the
provenance and internal evidence provided by three private stelae and by patterns in the use of the votitional epithet Son-of-Bastet that do imply some kind of northern affiliation for the king.24 Such problems, among others, have given rise to yet more theories regarding Pedubaste’s regional power base and capital.25 Quite recently, one scholar closely involved in these historical discussions has revisited the question and, while continuing to set aside any evidence from the bronze, relies mainly on synchronisms to argue that Pedubaste Son of Isis/Son of Bastet must have reigned in the last decades of the ninth century outside the two series of kings constituting northern and southern Dynasty 22—but with influence in both areas.26

These extremely complicated matters have given rise to highly ramified and contingent arguments that form a specialized area of competence. Insofar as they bear on the bronze torso of Pedubaste, there is no chronological change, nor has any definitive terminological distinction resulted from the suggested revisions, although the manner of thinking about the period’s organization has clearly shifted. However, as far as the discussions pertain to specifying the king’s area of influence and thus acknowledging possibilities for the find spot or production of the bronze, there are distinctions. Ideas emerging in the most recent discussions would seem to accord best with the evidence for a Tanite find spot.

Technical Examination

Investigations of the figure of Pedubaste were carried out in the Sherman Fairchild Center for Objects Conservation at the Metropolitan Museum and in the Oficina de Restauro at the Museu Calouste Gulbenkian. X-ray radiography, energy-dispersive X-ray spectroscopy (EDS), scanning electron microscopy (SEM),27 metallography, and polarized-light microscopy,28 in addition to visual examination under magnification, were carried out in order to determine its present condition, to characterize the materials and methods used to produce this elaborate work, and to establish its place in the technological development of ancient Egyptian bronze statuary.

Condition

The fragment extends from the lower rib cage to the top of the left knee and the middle of the right knee. The measurement of twenty-three centimeters from hipbone to midknee suggests an original height of seventy-four to seventy-eight centimeters, exclusive of any possible headdress.29 Much of the back side is lost (Figure 7), including what was a large patch used presumably to repair a casting flaw. The bronze appears to have suffered several strong, intentional blows that gouged the surface (Figure 3), distorted the leopard head on the apron (Figure 5), cracked the metal above the left hip (Figures 3, 8), and deformed the metal above the buttocks at the break edge, probably thereby helping to dislodge the patch. Longitudinal cracking and distortion of the wall along the break edge on the proper side of the left leg (Figure 9) may likewise be the result of percussive impact. Alternatively, the latter damages could have occurred during casting, when the molten metal cooled and contracted around a hard, unyielding core,30 or after deposition, from the pressure produced when an iron armature inside the leg rusted, increasing its volume in an enclosed space too small to accommodate it.31

The current condition of the figure and the distribution of corrosion within the dendrites of extant metal, observed in a polished section during metallographic examination, both confirm that when found the bronze was covered with a massive crust of archaeological corrosion. At what point the figure was cleaned is undocumented, as discussed above, but this surely took place before Wiedemann recorded the hieroglyphic inscriptions. After removal of the corrosion, the surface of the bronze probably appeared as it does today, a dull brownish black and heavily pitted (Figure 2; ColorPlate 20). In some areas it is more severely eroded, as demonstrated by the loss of surface detail and by the difference between the relatively raised position of some of the gold inlays, which corresponds more or less to the original surface, and the current surface (Figure 10). There are occasional patches of massive green and red corrosion products, and a few bright green spots of active bronze disease were noted when the figure was examined in the Sherman Fairchild Center.

The interior surfaces are covered with a layer of pale green corrosion, and some core material survives in the cavities. Two paper labels are adhered to the back side of the abdomen wall. The larger, rectangular label is handwritten and makes reference to the bronze as number 612 in the Muller sale of 1921, at which Gulbenkian acquired the statue (Figure 11).32 The text on the smaller, round label, perhaps stamped rather than handwritten, is illegible.

Three gold chevron inlays in the belt over the right hip, visible in the photograph that appeared in the Pollak and Muñoz catalogue (Figure 4), are no longer in place. Located fourth from the center on the top row, and third and sixth on the middle row, these inlays do not appear in photographs made for the catalogue of the 1937 British Museum exhibition33 and
Figure 7. Pedubaste torso fragment, reverse
(photo: B. Barrette)

Figure 8. Pedubaste torso fragment,
detail showing damage to left hip
(photo: D. Schorsch)

Figure 9. Pedubaste torso fragment,
interior of left leg, showing (a) distorted and cracked
wall of leg, (b) bronze wall
between core cavities, (c) black and (d) red cores in main core
cavity, (e) red core in leg core
cavity, and (f) casting fin
(photo: D. Schorsch)
and are barely discernible or entirely obscured in the early photographs. They were revealed again only after a second, superficial cleaning, probably carried out before the figure was displayed in the British Museum. In any case, the head of the goose and the spot over the leopard’s right eye appear to be modern, while the smaller spot just to the right of the leopard’s right eye may be a replacement for a fragment of a spot that was visible in the 1911–12 catalogue photograph. The chevrons on the belt and feather apron are heavily abraded, perhaps as a result of the first cleaning, and many bear deep scratches or linear gouges that are continuous across the front of the figure. Little remains of the gold sheet used to inlay a ritual scene on the torso just above the waist. When the statue was displayed in New York in 1999–2000 and reexamined in Lisbon in 2003, thin tarnish films covered many of the “copper” chevrons and several gold ones.\textsuperscript{35} The entire surface of the figure appears to have been coated with a wax or resin.

\textit{Manufacture: Casting Technology}

The statue of King Pedubaste is hollow (Figure 12) and was cast using the direct lost-wax method. Hollow-cast statuary was first produced in Egypt during the Middle Kingdom (ca. 2051–1650 B.C.).\textsuperscript{36} and although a handful of hollow royal figures can definitely be dated to the New Kingdom (ca. 1550–1070 B.C.),\textsuperscript{37} it was during the Third Intermediate Period that elaborately decorated bronzes displaying the refinement, the ambition in execution, and the scale of this royal figure first appear. These many centuries, from the beginning of the second millennium until the middle of the first millennium B.C., were experimental years in Egyptian bronze casting. By virtue of its manufacture, each direct lost-wax cast is unique, but statuary dating from this period is particularly variable in its production, especially when compared with the small statuettes of kings, deities, and sacred animals produced in large numbers during the Late, Ptolemaic, and Roman periods (664 B.C. to A.D. 330), which are not only technologically more uniform but often aesthetically less significant.\textsuperscript{38}

The traditional lost-wax method consists of the following series of steps. An exact model of the final object is formed in wax and invested with a refractory mixture of clay and sand with some organic matter. If the cast is to be hollow, the wax is modeled over a core made from a mixture similar in composition to that of the investment. The wax is slowly melted and poured or volatilized from the investment, leaving a void that replicates exactly the contours and dimensions of the model. The ceramic investment is fired and molten
sprue and runners, and sometimes gates and vents, is added in wax. When melted away, the sprue creates a central vertical channel for the metal to flow into the runners, which are vertical members attached directly to the model. The model can be connected indirectly to the runners by horizontal channels known as gates, while vents allow gases that accumulate in the investment, the core, or the molten metal to disperse. Core supports may be inserted before or after the investment is applied. When the investment is removed, the sprue, runners, gates, and vents—now replaced by metal—are chiseled away, and the surfaces are then cleaned by chasing, grinding, and polishing.

The torso fragment has two core cavities, which indicate that at least two separate cores were modeled, clad with wax sheets, and invested together to be cast as a single piece. The larger cavity, contained within the body, the right leg, and the upper part of the left thigh, is separated from the second cavity in the lower part of the fragmentary left leg by a bronze wall that now replaces the wax sheet used to join the two cores (Figures 9, 12). Such joins are seen in larger hollow-cast Egyptian bronzes and have been observed even in relatively small examples. The location of the joins varies, but human or anthropomorphic figures often have a solid neck with a separate core in the head or, if seated and wearing a long garment, a separate core in their lower legs separated by an internal bronze wall near the knees (Figure 13). Casting cores, after they have dried, can be friable and are easily damaged. The use of multiple cores may have been intended to avoid the problem of breakage and certainly was a practical solution when it did occur.

Casting cores in Egyptian bronzes typically were left intact, unless the pieces were intended to function as sarcophagi, which is the case for many of the hollow-cast animal figures dating to the first millennium B.C. While most of the core material originally inside the Pedubaste figure probably eroded and dispersed during burial or was removed after retrieval, there are remains of two different casting cores. A hard black core, similar in appearance to those commonly found inside ancient Egyptian bronzes, is concentrated in the left leg; adjacent, in the same cavity, where the leg joins the body, is a second, even harder, red core (Figure 9). A trace of red core material also survives in the separate cavity in the left leg. The transition between the red and black materials in the main cavity is relatively sharp, as though the modeling of the core had begun with one material, with the second applied to a smoothed edge. The use of two different cores within a single cavity in an ancient Egyptian bronze, or even in two different cavities in the same cast, is previously unreported.
In fact, little attention has been paid to the cores present inside ancient Egyptian hollow-cast metal statuary, although some consideration has been given to the potential use of thermoluminescence analysis for dating works. Samples of both core types in the figure of Pedubaste were mounted and prepared as thin sections and examined using transmitted light and in the scanning electron microscope, supplemented with EDS analysis. As expected, in their basic aspect the cores are quite similar, consisting primarily of quartz, clay minerals, and some feldspar. Since both cores contain comparable amounts of iron, probably associated with the clay and also present as an impurity in other constituents, and were heated within the cavity under the same atmospheric conditions, it is
presumably the absence or presence of organic materials in the two mixtures that accounts for the red and black colors. Unrelated to this aspect, but also a significant difference between the two, is the occurrence in the red core of substantial numbers of green, copper-rich spheres, approximately fourteen microns in diameter (Figure 14), as well as lead-rich crystals and some metallic lead, all of which were undetected in the black core. The concentric structure of the green copper-rich inclusions suggests that they formed in situ over an extended period of time around metal particles entrained in the core. It seems likely, therefore, that incorporated in the red core was refractory material, recycled from another metallurgical process, which contained microscopic metal particles that corroded within the core cavity during burial. In view of the lack of comparative studies of ancient casting cores, no further conclusions about the cores can be made at this time, but the near absence of casting fins on the statue’s exposed interior surfaces (Figure 9) may attest to their hardness. Casting fins are narrow ridges that form when molten metal flows into cracks in cores, investments, or molds. When present, such flaws are generally removed from exterior surfaces during the finishing process.

When hollow statuary is cast, some provision must be made to support the core after the wax has been removed from the investment. Sometimes part of the core is made to extend through the wax cladding, where it can be embedded in the investment. Two other traditional means of supporting a core during casting are metal armatures that run through the core and extend into the investment, usually through the undersides of the feet on figural statuary, and small core pins, also called chaplets, that are forced through the investment wall and wax layer into the core.

Iron came into general use in Western Asia during the second half of the second millennium B.C., but Egypt was very slow to adopt ferrous metallurgy. With a few notable exceptions, among them one of the daggers discovered on the body of King Tutankhamun (ca. 1336–1327 B.C.), few iron artifacts found in Egypt have confirmed dates prior to 1000 B.C., and they continued to be relatively rare until the mid-first millennium. Nevertheless, iron core supports were already used in Egypt during the Third Intermediate Period; during the Late Period (664–332 B.C.) and onward, hollow bronze was cast almost exclusively using small wrought-iron core pins that were square or rectangular in section (Figure 13).

The surviving torso fragment has five quite large iron chaplets. They are located in the center of the chest just below the break edge, in the upper cartouche on the feather apron, near the bottom center of the buttocks, and one in each thigh. The rectangular sections—sometimes displaying a laminar structure that confirms their manufacture by hammering—are clearly visible in the radiographs (Figures 15, 16), despite how distorted by corrosion the supports themselves appear on the inside of the figure (Figure 17). Unlike Greek and Roman bronze founders, who typically removed core supports and hammered or cast bronze plugs into the holes left behind, ancient Egyptian metalworkers cut off only the end of each chaplet where it extended outward from the exterior surface. The remaining lengths of the supports, however, are rarely preserved in a metallic state, usually surviving only in the form of corrosion.

Imbedded in the core of the Pedubaste figure was at least one section of iron armature, which would have given it additional strength during the manufacturing process. Although well-positioned armatures may be used to support the core during casting and eliminate the need for chaplets, when armatures are present in ancient Egyptian bronzes there are usually also core supports. All else being equal, armatures are more likely to be found in larger statuary, and in Egypt, the use of iron armatures may be an innovation of the Third Intermediate Period. Iron armatures are present inside several figures in the British Museum and in a female figure in Leiden, all dated to the Third Intermediate Period. Large Egyptian statues excavated at the Temple of Hera on the Greek island of Samos were part of later deposits but seem to be stylistically datable to this period. Armatures, intact or in traces, can be seen inside some of the more fragmentary works with exposed cores, such as a torso of a priest, two right leg fragments, a fragment of a garment with a right leg, and possibly a second torso fragment. The Samos

Figure 16. Pedubaste torso fragment, detail of front-view radiograph showing core support in abdomen and inlaid was scepter, indicated by arrows (photo: D. Schorsch)

Figure 17. Pedubaste torso fragment, detail of core support on interior wall of abdomen (photo: D. Schorsch)
bronzes, which have not been radiographed, appear to have core supports as well as the armatures; the British Museum bronzes also display both features.\textsuperscript{58} Even some quite small casts, such as a leg attachment for an ibis sarcophagus measuring approximately eighteen centimeters in length, occasionally contain iron armatures (Figure 18).\textsuperscript{59} The iron armature here seems superfluous because it is entirely internal and was not used to anchor the core in the investment during casting; a single core support is visible in the side-view radiograph.\textsuperscript{60} The cracking of the metal walls is probably due to the expansion of the iron as it corroded. An unusual U-shaped, flat, cupreous armature is present inside a small bronze figure of the Nile god Hapy, which may well date to the Third Intermediate Period.\textsuperscript{61}

As for the figure of Pedubaste, the combined efforts of armature and core supports did not prevent the cores from slipping backward and slightly to the right during casting, producing extremely thick walls that measure up to two centimeters in the front of the torso and the advancing left leg (Figure 15). This was at the expense of the now barely extant back wall, which, owing in large part to its extreme thinness, was both more susceptible to mechanical damage and more vulnerable to the corrosive burial environment. When the cores slipped, the armature in the right leg cavity became imbedded in the inside of the front wall of the leg (Figure 19). Although iron has an atomic weight slightly lower than copper, and substantially less than tin and lead, armatures within casting cores typically are easily seen in radiographs of hollow bronzes (Figure 18). In the Pedubaste figure, however, the armature fragment is not visible because of
the substantial radiopacity of the thick bronze wall in which it is embedded.

Barring such accidents, the thickness and evenness of the walls depend entirely on the character of the wax sheets used to clad the core: if the wax is applied in sheets of a consistent thickness, the walls of the cast will be even. Hollow casts often terminate in independently modeled solid components, and depending on their size, figures with hollow legs, for example, often have solid feet (Figure 13). The Pedubaste torso has no surviving extremities, but the use of solid wax components that were modeled separately and applied to wax sheets over the core was noted in visual examination and confirmed in the radiographs. These include the leopard head, the lower section of the feather apron where it extends over the right leg (Figure 12), and the adjacent lower edge of the kilt, which then flows across the legs, articulated only in shallow relief. The wax sheet applied to the abdomen was thinned where forced into a depression for the navel modeled in the core (Figure 12).

Other than the shifted cores and the resultant loss, the quality of the casting appears relatively good, judging from the lack of porosity. As a rule, Egyptian bronzes, whether solid or hollow, rarely have surface repairs. In theory, repairs are required more frequently on larger works, both because they are more challenging to cast and because, representing a far greater investment of time and fuel, they are less apt to be discarded as defective during manufacture. Although hammered patches are occasionally seen on Egyptian bronzes, usually on works of the second half of the first millennium, the infrequent repairs that are observed tend to be of the cast-in variety (Figure 20). By contrast, Greek and Roman bronzes, both large and small, have numerous plugs filling small voids left by core supports intentionally removed after casting, as well as patches of all sizes used to repair casting flaws. Hammered plugs were employed to improve porous surfaces on some of the rare extant examples of Egyptian solid-cast silver statuary, silver being a softer metal that is more easily cut. The scarcity of such patches on Egyptian bronzes, at least until the mid-first millennium B.C., may reflect the difficulty of preparing a bronze surface without suitable iron tools, although it is possible that a consistently better quality of casting may have necessitated fewer surface repairs. On the other hand, Egyptian bronze founders may have been more ready to recycle faulty castings than to repair them, although such an assumption would be difficult to document. In view of the perceived resistance in Egypt to ferrous metallurgy until well after it had been widely adopted in the Near East, it is worth noting that only implements made of iron could have cut the rectangular opening recessed into the bronze wall near the buttocks (Figure 21), which previously accommodated a large patch covering the lacuna produced during casting.

Visual examination of Egyptian bronzes over the last several years has revealed other instances in which iron tools were employed for a similar purpose during the Third Intermediate Period, such as on the left foot of the figure of Meresamun, "Singer of the Interior of Amun," and more examples will surely follow. One of the largest extant Egyptian bronzes, a striding figure of Horus in the Louvre, also said to date to this period, shows evidence for the use of iron tools in its original manufacture: the irregular recess in the advancing left leg was cut into the metal, possibly to accommodate the tab on the shendyt kilt.

Metallographic Examination and Alloy Composition
A polished section prepared from a sample removed from the back of the left leg and examined with a metallographic microscope revealed no unexpected features, and dendrites attesting to manufacture by casting and a healthy layer of intergranular cuprite confirming the archaeological origin of the figure were observed. In addition, EDS analysis carried out on the section indicates that the alloy—an unled bronze containing approximately 93.4 percent copper,

![Figure 21. Pedubaste torso fragment, detail showing lower perimeter of opening prepared for hammerd-in patch (photo: D. Schorsch)](image)

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3.7 percent tin, and 0.7 percent lead—is consistent with the figure’s Third Intermediate Period date. The earliest figural Egyptian bronzes, which were produced during the Middle and New Kingdoms, generally contain low to moderate amounts of tin and no lead. In the first millennium B.C. the percentage of tin is often higher, although Jack Ogden notes a decline in tin content during the Third Intermediate Period.\(^6\)

The question of when the consistent production of intentionally leaded bronzes began in Egypt is far from settled. According to Eleni Vassilikà, lead is virtually absent in bronzes until Dynasty 20 (ca. 1180-1070 B.C.), while the extremely high lead contents traditionally associated with Late Period or later alloys can be attested to as early as Dynasty 22 (ca. 945-713 B.C.).\(^7\) Vassilikà bases her conclusion on the analysis published by Paul Craddock of the figure of King Pami,\(^7\) who reigned in the latter part of Dynasty 22, a period that overlaps with Dynasty 23 (ca. 818-713 B.C.), and who therefore actually postdates Pedubaste.\(^7\) A substantial amount of lead is present in an unusual alloy used to cast a Third Intermediate Period private male figure attributable to the time of Dynasty 22,\(^7\) also in the British Museum.\(^7\)

Although all metallurgical traditions are marked on one hand by precocious innovations immediately abandoned, and on the other by conservatism in the face of new developments, one observes in ancient Egypt the systematic introduction of new alloys, paralleled elsewhere in the Old World. Unalloyed copper was supplemented, and later virtually supplanted, by arsenical copper, which was then replaced by low-tin bronze and in turn by leaded bronze alloys with a higher tin content. Despite this observed progression, the current dearth of Egyptian figural bronzes that are securely dated by inscription or archaeological context, or even attributed on the basis of credible stylistic analysis, renders premature most discussions of dating, authenticity, or trends in alloying practices based on overall composition.\(^7\) The trace amount of arsenic (0.4 percent) detected in the alloy used to cast the figure of Pedubaste is said to be typical of bronzes postdating the New Kingdom, although pieces containing considerably more arsenic have been cited.\(^7\) Whether such alloys resulted from the exploitation of arsenic-rich ores or the recycling of older metal-work cannot be established, although in either case, if the arsenic content is sufficiently high, the alloy may have been chosen for its distinctive color or ability to be artificially patinated.\(^7\) The iron content (1.8 percent) in the Pedubaste torso is higher than generally reported for Egyptian bronzes of the first millennium.\(^7\)

**Manufacture: Surface Treatment**

The elemental composition of the bronze alloy itself provides insight into the original appearance of the figure’s surface, which at this time is quite dark. While it may once have seemed reasonable to assume on the basis of its appearance that the figure is a “black bronze,” this is now known not to be the case. So-called black bronzes are works made from copper alloys with artificially induced, luminous black patinas, which were typically decorated with inlays of precious and nonprecious metals as well as with nonmetallic materials such as stone, glass, and faience.\(^7\)

The first black bronzes appear in Egypt during the late Middle Kingdom (ca. 1859-1650 B.C.),\(^8\) and simultaneously in the Aegean and Levant, with some examples dating to the New Kingdom.\(^8\) But the alloy was used to the greatest effect during the Third Intermediate Period, when bronzes became increasingly prominent in temple practices. The basis of the patination process is the presence of a small amount of gold intentionally added to the base alloy, which produces a coherent black surface layer when the metal is chemically treated.\(^8\) The absence of gold in the bronze used to cast the figure of Pedubaste indicates that the statue was artificially patinated by another, as yet undiscovered, technique or that it was not patinated at all, which may be thought surprising in view of its striking polychrome surface decoration.

In fact, recent analyses and new insights suggest the latter alternative to be more common than previously thought.\(^8\) The figure of the “God’s Wife of Amun,” Karomama, in the Louvre, with its gilded flesh virtually clothed in garments of inlaid metal, is arguably the finest example of Third Intermediate Period large-scale, elaborately decorated statuary.\(^8\) Among nonfigural works, this distinction belongs to the fragment of a bronze menat inscribed for Harsiese in the Ägyptisches Museum, Berlin, which displays a range of metal colors and surface treatments in its elaborate inlay.\(^8\) Both works have black surfaces, but recently published analyses of the Karomama figure, which was cast in several sections, confirm that neither the body nor the base is an intentionally produced black bronze, at least not of a type consistent with the current understanding of ancient technological processes.\(^8\)

Upon review, it appears that many of the Third Intermediate Period works thought to be black bronzes have not been analyzed instrumentally to confirm this visual assessment, as is also the case for some of the alleged black bronzes of the second half of the first millennium B.C. Many archaeological copper and copper-alloy artifacts, both from Egypt and elsewhere, have dark brown-black surfaces that are the result of
cleaning and repatination processes and are not patinas intentionally produced in ancient times.

Traces of gold are visible on Pedubaste’s kilt—for example, on the reverse below the break edge—and on the front and back of the left thigh, but the method used to apply the leaf cannot be established. Various metallurgical mechanical and adhesive gilding methods used in ancient Egypt have been described. In this case, given the options available to craftsmen in Ptolemaic times, and the absence of evidence of another method, some form of oil gilding—leaf gilding using an organic adhesive medium—seems most probable.

The king’s belt and apron are inlaid with chevrons of gold and “copper” that read visually as yellow and red, respectively. There are also gold hieroglyphs on the apron, and gold figures of deities on his abdomen. The inlays were fixed mechanically by crimping and hammering (Figure 22). Gold “strips” that circumscribe some of the deity figures correspond to the surviving edges of these gold sheets where they were secured beneath flanges in the bronze (Figure 23). For the strictly linear elements of the inlay, such as the cartouche borders and some of the hieroglyphs, deliberately cut narrow strips of gold were hammered into channels that had been carved into the wax model prior to casting.

Analyses of one “copper” and two gold chevrons, as well as gold from one of the hieroglyphs, were carried out using EDS. The three gold samples are similar in composition, averaging approximately 71 percent gold, 22 percent silver, and 7 percent copper. Most Egyptian gold generally contains silver or is actually electrum, a naturally occurring alloy of gold with 20 or more percent silver, and, indeed, like gold inlays on the Pedubaste figure, most examples are ternary alloys of gold, silver, and copper. As a rule, however, Egyptian auriferous ores do not contain more than 1.5 percent of the latter; in this case, the starting material was probably an electrum containing approximately 78 percent gold, to which copper was added.

On the other hand, the composition of the so-called copper inlay, which is actually a gold-copper alloy containing approximately 56 percent gold, 43 percent copper, and 1 percent silver, is rather unusual, although the recently published analyses of inlays on the figure of Karomama, which is traditionally described as having inlays “d’or rose, d’argent, d’électrum(?)”, pâte noir et blanche (yeux), cuivre rouge (inscription du socle), have highlighted comparable examples. In the New Kingdom, during the reign of Akhenaten (ca. 1352–1336 B.C.), quite occasionally red-gold alloys were produced through the addition of large amounts of copper to gold. A few examples of high-

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**Figure 22.** Pedubaste torso fragment, detail of chevron inlays on belt (photo: D. Schorsch)

**Figure 23.** Pedubaste torso fragment, detail of abdomen with gold strips delineating deity figures, (a) ankh, and (b) other gold strips embedded in massive corrosion (photo: D. Schorsch)
surfaces on bronzes, as recent investigations offer increasing evidence for the development in Egypt of a second polychrome tradition, employing a different, softer palette.

The figure of Pedubaste, as far as can be ascertained in its fragmentary condition, and most certainly that of Karomama reflect this aesthetic, as do bronze figures of Montu-Ra and Khnum, both dated to the Late Period, recently studied at the British Museum in the former Department of Scientific Research. In addition to the three, or possibly four, metal colors it now displays, the statue of Pedubaste may have had details inlaid in patinated bronze alloys, including black bronze, which was used for the hieroglyphs on the base of the figure of Karomama. The separately cast figure of Karomama and its base were unpatinated, and each may well have been of a different color, owing to their varying tin contents, 3.67 and 12.6 percent, respectively. Their surfaces were decorated with inlays of gold, electrum, a “red gold” with a high copper content, and a copper alloy with a black patinated surface; the eyes were inlaid with stone and the face, arms, and legs gilded.

The overall surface of the statue of Montu-Ra was also unpatinated. Gold inlay decorates the cobra hoods on the double uraeus and defines the eye sockets, while the eye stripes and nipples are inlaid with an arsenical copper alloy containing small amounts of lead and tin. The color of this metal would not have been significantly different from that of the bronze substrate, but, as Susan La Niece and her colleagues suggest, the inlays may have been patinated a dark brown with a process analogous to the one used to produce black bronzes. Although the god wears an inlaid black-bronze broad collar, itself inlaid with gold and electrum, the overall color scheme features tones graduated from light to dark, with black as one end of the spectrum rather than a fixed point against which the other colors are contrasted. The British Museum figure of Khnum, which like the Montu-Ra is an unpatinated bronze alloy, has toenails and fingernails inlaid with electrum and a solar disk overlaid with gold foil. The inlays in the atef crown are a high-tin bronze that is paler in color than the figure itself. Both of these statues had inlays in their eyes that do not survive.

Reconstruction and meaning

Inlays on the chest
As the upper part of the torso was broken away, none of the heads of the figures inlaid with gold sheet on the king’s chest are preserved. In addition, the surface is so corroded that much of the inlay is lost, although it may have been stolen at or before the time the piece was intentionally damaged in antiquity (Figures 23, 24). Two groups of figures converge toward the center of the chest. At the center on the left, as one faces the statue, is the lower part of a mumiform figure with no visible arms or staff, followed by the lower part of a striding male whose arms cannot be traced. At the outermost edge a female figure holds an ankhs in her right hand and in her left grasps a staff, certainly the papyrus scepter of a goddess, although the terminal is not visible. Advancing toward the center on the right is a striding male figure who extends the one arm that can be seen. Although it is invisible on the surface, radiographs reveal a forked form in gold inlay directly beneath the extended hand of this figure, clearly indicating that he holds a was scepter (Figure 16). Behind him are traces of the lower parts of two additional figures, best understood as a striding male and a female, but the gold remaining from the inlay does not permit a definite description.

The figures would seem to be fairly elongated, but this is difficult to confirm, since not one of them is complete; even their proportions are hard to gauge and compare because so many definition lines are missing. In the interstices between several of the figures, particularly in the rather wide space behind the mumiform figure, there are remains of inlay
that might represent identifying hieroglyphs or could simply be gold sheet displaced from elsewhere.

The mummiform figure is surely one of the mummiiform gods, most probably Osiris, Ptah, or Min. There are other mummiiform gods such as a popular form of Re-Harakhty, Ptah-Sokar-Osis, and Khonsu and other moon gods. The mummiiform Re-Harakhty and Ptah-Sokar-Osis are, however, more strictly funerary gods, while Khonsu and the moon gods seem unlikely since they are usually sons and would not head a family group, as is suggested here by the presence of a female goddess. Osiris can be shown either with elbows projecting on either side of his body, as his arms cross in front of his chest to hold the crook and flail, or with hands emerging from his wrappings on the front edge of his profile figure and holding either the crook and flail or a staff. Ptah generally carries a staff and is often shown inside a shrine, while Min is usually depicted with erect phallus, one arm extended to the rear to hold a sceptor, and a long ribbon extending from the back of his head to the ground. Although there is space enough around the mummiiform god to accommodate such elements, nothing relating to a long staff, Ptah’s shrine, or Min’s ribbon can be identified. Neither is there an indication of Min’s erect phallus on the front of the figure, which should be preserved to a sufficient height to have shown this feature. The preserved traces best suit Osiris holding short scepters; in this case, the following figures would be Horus, possibly placing a hand on the shoulder of Osiris, and Isis. Nevertheless, since there is no guarantee that other features or attributes did not originally exist, a definite identification is not possible.

The presence of the was, commonly associated with male gods, suggests that the figure facing the mummiiform deity is also a god, probably followed by his family. Although the sceptor is occasionally carried by other figures, including kings, the following discussion tends to confirm the divinity of the figure.

A review of other large bronzes with preserved figural decoration, along with a few other relevant pieces, was undertaken in order to help recreate and understand Pedubaste’s decoration. Besides Pedubaste, only two statues with inlaid figural decoration can be unequivocally identified as royal. A statuette of Osorkon I from Tell el-Yahudiya bears on its chest a depiction of Thoth as an ibis on a standard, flanked on the right by a goddess with disk and horns and a wadjet scepter, and on the left by a falcon-headed deity in the double crown with a was scepter; on the back is a vulture with spread wings and shen rings clasped in its talons. The previously mentioned statue of Karomama, a Theban god’s wife whose name appears in cartouches on the counterweight of her collar and on her base, is encircled by large, elaborately inlaid wings symbolic of divinity (Figure 25). Both are clearly examples of ritual statuary: Osorkon by the nature of the royal role in general and of that known for small bronze royal statuary, Karomama by the nature of the role of the God’s Wife, which is in many respects
similar to that of the king, and by an inscription that describes the placement of her statue to appear as pilot on the bark of Amun.\textsuperscript{113}

Other large decorated metal statues, all certainly to be dated to the period from Dynasty 22 through perhaps the mid-Saitite period (ca. 945–589 B.C.), show a wide range of ornamentation. One group displays gods and divine emblems but no depictions of interaction between the divinities and the statue owner. Some of these include decorative elements that overlap with the types found on coffins; inscriptions clearly classify certain of these bronzes as funerary statuary, even if they also had another function within the temples where presumably all of them stood. Takushit’s statue is an example of this type (Figures 26–28).\textsuperscript{114}

While covered with precious-metal inlays illustrating a whole theology, in which the gods of Behbeit el-Hagar are privileged (probably signaling her origin), Takushit has an elaborately crowned djed pillar on her back (Figure 27), a popular decoration for the back walls of coffins since the djed is assimilated to the backbone of Osiris, and inscriptions on the statue clearly refer to her as “the Osiris Takushit.”\textsuperscript{115} An unnamed female in Berlin has a figure of Osiris on each thigh and on the right calf, the henu bark of Sokar on her chest, and an Abydos fetish on her back.\textsuperscript{116} The upper body of a man in the British Museum, discussed above with respect to its unusual alloy, has the henu bark of Sokar on the chest.\textsuperscript{117} Padimen in the Louvre, whose inscriptions do not specify his office, has a pectoral-like relief scene on his chest that depicts Amun flanked by Nefertem and Sakhmet; arranged vertically on both sides of a column of inscription on the front of his long skirt are two series of gods, one beginning with Ptah and the other with Amun.\textsuperscript{118}

A second group of these statues has only a small figure of Osiris on the shoulder or sleeve.\textsuperscript{119} The previously mentioned large statue of Meresamun in Berlin has a figure of Osiris on her right front shoulder.\textsuperscript{120} Another female, almost certainly from Karnak, retains traces of an Osiris figure drawn in the gesso surviving on her shoulder, although other decorations
may have been present that are no longer preserved. Pachasou, from Saqqara, has a small figure of Osiris on his right chest, and that, a priest of Amun who wears a leopard skin and elaborate jewelry, has one on his right shoulder blade.

A third group includes a few statues with decoration that does depict interaction between the statue owner and the gods. Khonsumeh, a priest of Khonsu and most probably from the Theban area based on his inscriptions, has elaborate linear decoration of gods, but he also touches a three-dimensional statuette of Osiris that merges with the front of his skirt, while relief figures of relatives (?) are depicted as offerers on the sides of his kilt. Governor of Upper Egypt, and associated with the town of Qus, Khonser dai su is dressed in a priest's leopard-skin robe. He once protectively held a now-missing statue and has a scene on his kilt showing himself worshiping Osiris, as well as a small incised figure of Osiris on his upper right front shoulder. A large bronze found in Samos represents an official also holding a base whose statue is missing, and the statue itself had at least one figure drawn near the hem of his skirt. A priestly role could be signified for these examples since all have shaven heads, although Khonser dai su's complete inscription does not include priestly titles.

Two interesting indications emerge. First, and a point that will not be pursued further here, the funerary aspect of much large bronze statuary is highlighted. This is a role that is distinct from the ritual-actor role associated with royal bronze statuary. For women active within the temple realm, the creation of the statue and the particular choice of material and type probably reflect their position in the temple and immersion in its cult practices. Similar considerations may have influenced the choice of statues by men, although the vagueness of our information on this point leaves open the possibility that the value placed on temple roles and bronze statuary during the Third Intermediate Period caused certain individuals to choose the type in order to create a temple association.

Second, and the significant point for understanding Pedubaste's decoration, is that the restricted indications currently available for large royal metal statuary, and for metal statuary in general, seem to indicate the decoration almost certainly showed confronted groups of gods rather than the interaction of god and king. The figures were most probably two divine family groups facing each other, one led by a mumiform god. Presumably their identities would offer geographic coordinates to further situate the bronze.

Although nothing is preserved of the corresponding area on the back of the Pedubaste fragment, which also may have been decorated, certain suggestions can be made based on the ornamentation preserved on other bronzes. The vulture grasping shen rings, an emblem occasionally seen on the back of the royal crown, appears on the back of Osorkon I. Takushit has on her back the djeel pillar of Osiris, an emblem often occurring on the back of cartonnage cases or on the interior rear wall of the lower part of coffins. The uninscribed Berlin female's Abydene Osiris fetish appears on the interior rear wall of the lower part of coffins but seldom in a focal position; perhaps this element on the back of the figure needs to be understood in relation to the Sokar bark on the front. On his upper back Khonsumeh has a depiction of a shrine in which Osiris, Horus, and Isis stand. If not decorated with a further scene of divinities, Pedubaste's back could quite possibly have borne the vulture or another emblem having a close primary association with royalty or a strong protective association, although it was probably not specifically funerary, given the divergences between royal and nonroyal statuary.

Figure 28. Statue of Takushit, left rear three-quarter view, detail of garment (photo: National Archaeological Museum, Athens)
Costume, pose, and style

The king wears a kilt that in its profile—low in back and high in front—suggests the typical royal shendyt (Figures 1–3). However, the usual belt and front panel have been overlaid or replaced with an inscribed, ornamented belt and apron, the latter stretching at a diagonal between the advancing left leg and the rear leg. The entire area of the garment was formerly gilded, and its ornamentation consists of relief and inlay.

The inscriptions on the belt and central column of the apron have been discussed above. The belt is patterned with three rows of inlaid chevrons, their points directed outward from the center, which are set in series of one “copper” column followed by three gold columns. Placed just below the belt, at the top of the apron, is a relief leopard head viewed as if from above; remains of gold inlay detail brow wrinkles and spots. On the apron three columns of chevrons flank either side of the inscriptional column, again set in series of one “copper” row followed by three gold rows, the points of the chevrons directed upward. These inlays are noticeably smaller on the edge of the apron that swings forward with the statue’s left leg, allowing space for two rows above and twenty-two rows below the leopard’s ear, and larger on the edge that slants back toward the right leg, allowing two rows above and only twenty rows below the leopard’s ear. This difference causes a very noticeable offset in the alignment of the rows of “copper” chevron inlays, an effect that in such a statue is surely intentional. At the bottom of the belt is a frieze of seven uraei crowned with sun disks; traces of gold inlay still remain in the hoods of the cobras.

The chevron arrangement of belt and apron forms the feather pattern, a reference to the king’s association with the divine falcon. Sometimes extended to a drape or a corset, this patterning began to occur with some frequency in the middle of Dynasty 18, although there are antecedents. Betsy Bryan has studied three instances in which Amenhotep III, assimilated to the god Neferhotep, wears the combination seen on Pedubaste—feather apron, dependent uraei, and a panther head (the panther, leopard, and cheetah were equated in religious iconography). She determined that in such instances, the combination alludes to the panther as sky goddess protecting the rejuvenated/reborn king, who, like Re, travels the solar course. The entire costume then emphasizes the king’s divinity and his role as son of the sun god, whose protection must be ensured, and may have associations with the renewal effected by the heb-sed festival.

The costume in this complete form continues to appear in the Ramesside Period (ca. 1295–1070 B.C.), and it occurs as well in various abbreviated examples. While we are not aware of another figure besides Pedubaste wearing this particular composite garment during the Third Intermediate Period, kings of that period certainly wore elements of the elaborate falcon costumes. Among bronzes in particular, the statuette of Osorkon I and that of a kneeling king in Baltimore, probably dating to the later ninth century B.C., wear the feather-patterned belt. Thus, it seems likely that the composite costume worn by Pedubaste continued to have associations such as those discussed by Bryan.

More difficult to assess are questions relating to the pose and style of the original statue. First and foremost, there are some uncertainties in determining the proper upright position since the angle of the upper torso could vary somewhat from the strictly upright, especially in a statue enacting a ritual. In the photographs published in the well-known catalogues, the fragment has been set on the break edges of the knees. Since more metal is preserved on the left side of the left knee, this has resulted in the torso’s being thrown back slightly. In addition, because a partially preserved statue presents problems of orientation, photographs have tended to center on the decorated apron and, as a result, to look upward toward the chest. Upon close examination, the statue clearly shows a strongly energetic motion, with the left leg rather far forward and actually swinging in front of the right. This certainly implies a shift of weight from one foot to the other. When mounted with this in mind, so that the tops of the knees—the only element of articulation preserved on each leg—are approximately level and expressive of balanced weight, the torso displays elegant, elongated modeling and possibly a very slightly forward lean, which is difficult to determine definitely because missing portions of the back lead to an inaccurate impression of the profile view (Figures 1–3).

The modeling of the torso is of particular interest, because description of the statue when properly set up, along with better understanding of the development of Third Intermediate Period art, allows some refinement of Cyril Aldred’s important observations on the subject. In the male bronzes of the period that he reviews, including the Gulbenkian Pedubaste, Aldred notes, “The belt tapers very little, if at all, and rests horizontally, well below the waist, on the broadest part of the hips, thus interposing between the thorax and lower abdomen a sculptural mass which attains a virtual independence with the navel as its isolated hub.” He remarks that this tendency is particularly well exhibited, partly because heightened by a kneeling pose, by a statue in the British Museum that he suggested also depicted Pedubaste but which is now known to represent King Pami (ca. 773–757 B.C.).
He also points out the way in which the Metropolitan Museum’s gold Amun (Figure 29), the focus of his article, was clearly associated with this type. Indeed, Pami and the gold Amun each show the compact torso with marked horizontal tripartite division, and the smooth, rounded abdominal area that constitute a clear archetype for Aldred.

In fact, the lines of Pedubaste’s torso and long legs have been somewhat distorted and rigidified by the fragment’s having been displayed and photographed as resting on the preserved edge of the rear leg and, thus, leaning too far backward. In that pose, the statue had indeed seemed to smoothly embody the archetype. When set up as detailed above, however, the narrowness of the upper body, the high hipbones, and the fleshiness of the long hips and thighs cinched by the belt are emphasized, while the definition and separateness of the abdominal unit do not emerge so emphatically. In the late ninth century, then, there is evidence of experimentation with a fleshy, elongated type of modeling that involves new attention to the structure of the abdominal area. Refined datings and reexaminations of metal statuary also suggest that, while Aldred’s characterization holds as the description of a tendency, that tendency had not yet fully coalesced, and the compact tripartite structure was not firmly established as far as we know until the time of Pami, pointing to a date for the gold Amun likewise somewhat later than “early Dynasty 22,” as Aldred had theorized.

The Pedubaste statue is unusual as it is one of only very few preserved large bronze statues of kings, and the only one of this period. The functions of these few large royal statues are difficult to categorize. They certainly might transcend the more specific purposes and attitudes of most preserved small royal striding statuary, in which only a restricted set of offering or protecting/revitalizing gestures is attested. Indeed, although its size is unknown, at least one other type of striding royal bronze existed. King Taharqo (ca. 690–664 B.C.) lists as a donation to Amun-Re, Lord of Gem-Aten (Kawa): “1 bronze statue of the King smiting foreign countries, and its 6 garments.” The best available model for a smiting Pedubaste is the gilded wooden statue of Tutankhamun slaying a hippopotamus, which more or less replicates the vigorous pose seen on temple pylons. In profile view, Tutankhamun’s stride is so long that his upper legs scarcely overlap. An angle drawn from the midpoint between his buttocks and abdomen down to the knee of each leg measures over fifty degrees. In contrast, Pedubaste’s legs overlap to a greater extent, and a similarly constructed angle between his legs measures only about thirty to thirty-two degrees, not significantly different from the measurement for the Metropolitan Museum’s gold Amun. Such measurements are hardly precise—differences in the proportions of the figures will have some effect, for example, and unless photographs are taken specifically for the purpose of such comparisons, divergence from true parallel between the plane of the camera and the statues is a major problem. Still, in this case, the variance is so large that it is clear Pedubaste’s pose did not match Tutankhamun’s. The sense of motion conveyed by the statue arises from

Figure 29. Statuette of Amun, Egypt, Third Intermediate Period, ca. 800–770 B.C. (?), find spot unknown. Gold, h. 17.5 cm. The Metropolitan Museum of Art, Purchase, Edward S. Harkess Gift, 1926 (26.7.1412)
torsion in the figure and a shift in weight rather than from an extraordinary stride (Figure 30).

This striking rendering of movement, then, probably reflects a stylistic interest more than anything else. Some contemporary large bronzes, whose poses are otherwise not out of the ordinary, very effectively convey an impression of energy or movement. Karomama’s left leg swings in front of her right so that her forward foot crosses into the alignment of the other and her left thigh crosses the inner profile of the right; her left shoulder is pulled forward, and her left breast slightly upward, by the movement (Figure 25). The male figure in the Louvre associated with Pahasou has quite a wide stride, which is not too successfully rendered since the advancing leg is inordinately lengthened. More effectively, Takushit (Figure 31) and Pahasou (Figure 32) are constructed so that an imaginary line drawn through the head and torso as seen in profile would bisect the distance between the feet, thus conveying a sense of natural, smooth transfer of weight in the movement from one foot to the other. Moreover, a few kneeling royal bronzes of the period incline slightly forward from the waist to extend an offering with additional urgency. Indication of movement—whether by positions suggesting prior or ensuing motion, by accompanying muscle tension, or as with Pedubaste by the course of actual motion—is by no means unknown in Egyptian sculpture. Although examples depicting the course of actual movement have been particularly noted in early Old Kingdom stone statuary and in wood statuary, they exist in later periods as well. Third Intermediate Period large metal statuary obviously marks another point of interest in this regard. Of the many potentially contributing influences two are clear: temple ritual statuary naturally involves at least a generic affinity for movement and performance, and temple roles during the period had an increased political importance that no doubt affected the attention given to the statuary associated with them.
Polychromy and motion

In light of the statue’s striking evocation of physical movement, the patterning of Pedubaste's apron is surely intended to provide a complementary animation of surface. The difference in the size and number of chevrons on either side of the apron and the offset of the color blocks generate instability and initiate motion.

Even if the effect can be described and makes sense in connection with the overall impact of the statue, locating an artistic context for such an atypical device is difficult. Vibration is more usually achieved in Egyptian art by placing different patterns in proximity or by alternating colors within an overall balanced structure. Certainly Karomama displays a highly complex surface that is patterned and alive with detailing and color but, as far as can be judged, still contained within general symmetries. On the other hand, although the effect achieved seems even more explicit than that seen on Pedubaste, the previously mentioned menat of Harsiese offers an example of a movement constructed over reinforcing levels of shape and color (Figure 33). On the outer rim, unidirectional outward-tilted wedge-shaped forms alternate with rosettes, the wedges colored in a warm-to-cool sequence, from copper to gold to silver, in order to create a circulation that strains centripetally against the rim.155

In his detailed discussion of the Harsiese menat, Friedrich Wilhelm von Bissing drew attention to possible foreign derivation (although none of the sources he located were very chronologically apposite) for some of the design elements, including the tilted wedges, seen there and on certain other pieces of

Figure 32. Statue of Pachasou, Egypt, Third Intermediate Period, 8th century B.C. (?), from Saqqara. Bronze, h. 47 cm. Musée du Louvre, Paris, E 7693 (photo: Service Photographique de la RMN, Maurice and Pierre Chuzeville)

Figure 33. Menat fragment, Egypt, Third Intermediate Period (6th–8th century B.C.), find spot unknown. Bronze, with metal inlay, h. 7.4 cm, w. 9.3 cm. Staatliche Museen zu Berlin, 23733 (photo: Ägyptisches Museum, Isolde Luckert 1965)
Third Intermediate Period metal polychromy. Two avenues of investigation more specifically keyed to developments in Egyptian art of the period may prove fruitful. First are the recent studies suggesting a second aesthetic existed at the time for polychrome works of art in metal, one that employed a different, softer palette. While studies of metal polychromy in ancient Egypt have appeared in recent years, clearly more work in the future is to be welcome. Second, especially given the possible interactions on an iconographic level between coffins and bronzes of this period, examination of color and pattern used on painted wooden coffins and stelae of the Third Intermediate Period might help to provide a context for better understanding some of the effects seen in metalwork.

ABBREVIATIONS

Aucouturier, Delange, and Meyohas 2004

Hill 2004
Marsha Hill. Royal Bronze Statuary from Ancient Egypt, with Special Attention to the Kneeling Pose. Leiden and Boston, 2004.

Hill and Schorsch 1997

La Niece et al. 2002

Schorsch 1988

Taylor, Craddock, and Shearman 1998

NOTES

1. João Castel-Branco Pereira, Director, and Maria Rosa Figueiredo Chief Curator, of the Museu Calouste Gulbenkian, and Emílio Rui Vilar, Director of the Calouste Gulbenkian Foundation, generously gave permission to make the studies discussed here during the course of the exhibition. They also kindly allowed reexamination of the figure in Lisbon in September 1993 and Gulbenkian Museum conservator Rui Xavier gave every assistance at that time. Katherine Baetjer, Curator of European Paintings, and James Draper, Henry R. Kravis Curator of European Sculpture and Decorative Arts, at the Metropolitan Museum of Art, who organized the exhibition, made it possible for this piece to be included and gave us all possible access to it during the exhibition. Dorothée Arnold, Lila Acheson Wallace Chairman of the Department of Egyptian Art, Metropolitan Museum, made this piece a priority among her recommendations for the exhibition. Preliminary remarks based on the observations in this article have been published in Hill 2004, pp. 155-75, no. 12.

2. It was purchased by Gulbenkian from Frederik Muller & Cie, Amsterdam (sale cat., December 13-15, 1921, lot 612), through the well-known dealer Joseph Duvene, as noted in “Only the Best: Masterpieces of the Calouste Gulbenkian Museum, Lisbon,” ed. Katharine Baetjer and James David Draper, exh. cat., The Metropolitan Museum of Art, New York (New York, 1999), p. 25, no. 7 (entry by Maria Helena Trindade Lopes). Many details of the exhibition history of the statue while in Gulbenkian’s collection may be deduced from Nuno Vassallo e Silva, “A Home for Our ‘Friends of a Lifetime,’” pp. 11-15, in the cited Metropolitan Museum catalogue. Maria Helena Assam, Coleção Calouste Gulbenkian: Arte egípcia (Lisbon, 1991), the Gulbenkian Museum’s catalogue of its Egyptian collection, discusses the statue on pp. 64-65 and lists the exhibitions in which it appeared that were accompanied by published catalogues. Entries and photographs from two of these catalogues will be referred to at various points in this study: Sidney Smith and I. E. S. Edwards, Ancient Egyptian Sculpture Lent by C. S. Gulbenkian, Esq., exh. cat., British Museum, London (London, 1937), pp. 10-12, 24, no. 18, pls. 32, 23, and John Walker and I. E. S. Edwards, Egyptian Sculpture from the Gulbenkian Collection, exh. cat., National Gallery of Art, Washington, D.C. (Washington, D.C., 1949), pp. 12-13, 24, no. 16, ill. p. 57. In addition, Gulbenkian lent the torso just after its acquisition to the Exposition Champollion, opening at the Louvre on July 12, 1922 (called the “Centenaire de Champollion,” the hundredth anniversary of Champollion’s “Lettre à M. Dacier,” which announced the discovery of the decipherment of hieroglyphs), and closing in December 1922. For this information, we are grateful to Élisabeth Delange, Conservateur en-Chef in the Département des Antiquités Égyptiennes, Musée du Louvre, and Bruno Martin, photograph archivist at the Service
Photographique du Centre des Monuments Nationaux, Paris. Calculation of the original height of the statue is discussed below.


4. Muñoz, “La collezione del conte Stroganoff,” pp. 85–86: “e Roma era poi stata la meta continua dei viaggi di lei che aveva pellegrinato per tutto il mondo, in Oriente e in Occidente.” In the same Roman milieu were other collectors of Egyptian art such as Giovanni Barracco (1829–1914) and Michel Tyszkiewicz (1828–1897), the latter also excavating in Egypt; see Pollak, Römische Memoiren, esp. pp. 189–91, 195–97, 223–25; Dr. Simona Moretti of the University of Rome, who has studied Stroganoff’s Byzantine collections, also confirms that he was in touch with these two individuals (personal communication). For the relationship of these figures to Egyptology, see Dawson and Uphill, Who Was Who in Egyptology, pp. 31 (Barracco) and 420–21 (Tyszkiewicz).

5. Muñoz, “La collezione del conte Stroganoff,” p. 86: “Il conte Gregorio si dette con passione, che era quasi mania, a rac-cogliere le cose più belle che gli venivano presentate dagli antichi-rari a Roma, a Parigi, a Monaco, a Colonia.”

6. Sammlung ägyptischer Alterthümer des Grafen Gregor Stroganoff (Aachen, 1886). The Museumsverein was the forerunner of today’s Suermont-Ludwig Museum, which still has a number of Egyptian objects from the Stroganoff collection. Since records concerning the earliest exhibitions of the Museumsverein are not entirely clear about the beginning date of the Stroganoff exhibition, part of the collection could have been exhibited there after the initiation of the exhibition program in 1878 and before the publication of the catalogue two years later. Indeed, Dr. Vardui Kalpakian provided a copy of an interesting document in the Bibliotheca Hertziana, Rome (housed partially in Stroganoff’s former residence), a “diploma” honoring Stroganoff issued by the Museumsverein on September 2, 1880, which states: “In dankbarer Anerkennung des tätigen Wohlwollens welches Sie . . . durch Überlassungen von Kunstdenstanden für die Ausstellung des Museums-Vereins solt fahren [authors’ emphasis] den Bestrebungen des Vereins bewiesen haben.”

For the Museumsverein, see O. E. Mayer, “Zur Geschichte des Aachener Museums und des Museumsvereins,” Aachener Kunstblätter 14 (1928), which describes Stroganoff and a second Russian, Dr. A. Swenigorodskoi, as contemporary lenders and longtime residents of Aachen (pp. 2–3, figs. 4 and 3, respectively). Swenigorodskoi was a collector of Byzantine enamels who came to Aachen for its famous baths, as Stroganoff perhaps also did. (Johannes Schulz, Die byzantinischen Zellen-E-mails der Sammlung Swenigorodskoi ausgestellt im städtischen Suermont-Museum in Aachen [Aachen, 1884]). Dagmar Preising and Michael Reif of the Suermont-Ludwig Museum and Christine Brennan of the Department of Medieval Art, Metropolitan Museum, were very helpful in regard to Stroganoff’s history with the Aachen museum. Dagmar Preising also kindly provided a copy of the rare catalogue.


9. Two Nubian furniture legs were offered as lot 493 in the Christie’s New York sale catalogue for December 9, 1999 (pp. 100–101 and frontispiece), with Stroganoff given as ex-collection. These are now in the Rijksmuseum van Oudheden te Leiden as F 2000/6.1–2; see Maarten J. Raven, “Twee poten van een Nubiisch grafted,” Bulletin van de Vereeniging Rembrandt 10 (Spring 2000), pp. 5–7. The anonymous seller from Monaco said that they were acquired in Rome from heirs of “Stroganoff” in the early 1960s. If, as seems almost certain, this is Grigory Stroganoff, he did have pharaonic-period Egyptian/Nubian objects aside from those recorded in the Aachen catalogue.


11. Kalpakian, “Il palazzo romano del conte G. S. Stroganoff,” p. 193, refers to the family’s return in 1922, but Pollak, Römische Memoiren, p. 229 n. 41, specifies that the wife of Stroganoff’s grandson reached Rome with her two daughters at the earliest in the second half of 1910 or the beginning of 1921.

12. Preface to Sammlung Ägyptischer Alterthümer. For Brugsch, see Dawson and Uphill, Who Was Who in Egyptology, p. 66. Brugsch was in Egypt from 1870.

13. Brugsch is known to have formed collections for private collectors, apparently sometimes at least with the approval of the Antiquities Organization, as, for instance, in the case of Anthony J. Drexel Jr.; see Gerry D. Scott, Temple, Tomb, and Dwelling: Egyptian Antiquities from the Haren Family Trust Collection (San Bernardino, Calif., 1992), p. ix. On the other hand, Brugsch’s reputation for complicity with antiquities dealers in Egypt has been frequently noted; see, for example, Warren Dawson, “Letters from Maspero to Amelia Edwards,” Journal of Egyptian Archaeology 33 (1947), p. 70 n. 1, and John Wilson, Signs and Wonders upon Pharaoh: A History of American Egyptology (Chicago and London, 1964), p. 215.

14. Brugsch makes no mention of the statue of Pedubaste in the list of royal names he published with Bouriant, Le livre des rois: Contenant la liste chronologique des rois, reines, princes, princesses et personnages importants de l’Égypte depuis Ménès jusqu’au Nectanébo II (Cauro, 1887), preface dating to 1886. He lists Seheribih “Petushtah” as the first king of Dynasty 23 (p. 107).

15. Inschriften aus der Säitischen Periode,” Recueil de travaux 8 (1880), pp. 63–64. Wiedemann points out that his earlier attribution (Ägyptische Geschichte [Gotha, 1884], p. 561) had been
based solely on Brugsch’s catalogue, in which only the second cartouche name is given, and had therefore identified the king as a different one, Seherib Pebdaste.

16. William Mathew Findlers Petrie, A History of Egypt, vol. 3 (London, 1905), p. 262: “That there were two kings named Pebdast is certain; one appears in Manetho as the founder of the XXIIIrd dynasty, about 750 B.C., the other is in the list of Ashurbanipal, nearly a century later. There are two throne names associated with the name Pebdaste—Scherib-ra-ra: Naos. Paris and Bologna / User.ma-at-ra: Bronze statue. Tanis; Figure of Hor. Cairo. We can only infer which is the earlier of these. It was the first Pebdaste certainly who ruled at Thebes, as his wall and quay inscriptions are exactly like those of the close of the XXIIInd dynasty. The second Pebdaste certainly reigned at Tanis, by Ashurbanipal’s inscription. As the woodwork of Seheraba must have been preserved in Upper Egypt, while the figure of Usermaatra was found at Tanis [authors’ emphasis], it seems fairly certain that Seheraba is the Theban Pebdaste, and Usermaatra is the Tanite.” Egyptologists now believe that Seheriba Pebdaste dates to Dynasty 27, the Pebdaste of the Assyrian inscriptions is a local kinglet and not a major figure, and Usermaatra Pebdaste, whose area of influence is discussed below, is the earliest of the three. And on p. 324, Petrie writes: “This king of Tanis, Pebdaste, does not appear in any dynastic list, as he was contemporary with the Ethiopians and early Saites; but his remains are known as follows [cartouches appear here]: Tanis, bronze torso inlaid with gold, 2/3 life size. Stroganoff Coll. at Aachen: si Bast added to the name (Rec. viii. 63).”

17. Gaston Maspero, L’archéologie égyptienne (Paris, 1887), pp. 291–92: “Un fragment qui est en la possession du comte Stroganoff, et qui a été recueilli dans les ruines de Tanis, faisait partie d’une statue votive du roi Pétoukhâou [sic]. Elle était exécutée aux deux tiers au moins de la grandeur naturelle, et c’est le morceau le plus considérable que nous avons jusqu’à présent.” We are grateful to Vardui Kalpakian, who called this statement to our attention.


19. William Mathew Findlers Petrie, Seventy Years in Archaeology (New York, 1932), p. 45: “An old roi of Mariette’s turned up and, as he knew much of the place, I took him on.”

20. James P. Allen, Curator, Department of Egyptian Art, Metropolitan Museum, kindly prepared the hieroglyphs.

21. Kenneth Kitchen, Third Intermediate Period in Egypt (1100–650 B.C.), 2nd ed., with preface (Warminster, 1996), pp. 125–26, secs. 98, 99; regarding the find spot of the statue, see p. 129, sec. 102. The Kushite period in Egypt (Dynasty 25, ca. 713–664 B.C.) is variously attached to the preceding Third Intermediate Period or the succeeding Late Period. In the context of this article, which focuses on metalwork, it is important to emphasize continuity with the Third Intermediate Period.


23. These suggestions were mainly put forward by Anthony Leahy in his “Appendix: The Twenty-Third Dynasty,” in Libya and Egypt, c. 1350–750 BC, ed. Anthony Leahy (London, 1990), pp. 177–95, but other scholars have contributed significantly to the reexamination and discussion. Kitchen’s Third Intermediate Period includes an important preface that references, in order to discuss, most recent suggested modifications to his schema; for issues relating to Dynasty 23, see pp. xxv–xxvii, secs. X–FF, responding mainly to Leahy. Leahy uses the terms Dynasty 23-K (the K refers to Kitchen) and Dynasty 23-M (the M refers to Manetho, and the Manethonian Pedaste is suggested to be Sehetepibre Pebdaste, a Tanite kinglet Leahy dates only roughly between 750 and 670 B.C.).

Jürgen von Beckerath pursued these revisions further in his “Beiträge zur Geschichte der Libyerzeit, 1: Die neuen Rekonstruktionsschläge und Manethos XXII. Dynastie,” Göttinger Miszellen, no. 144 (1995), pp. 7–13; and “Beiträge zur Geschichte der Libyerzeit, 3: Die Könige namens Pedurate,” Göttinger Miszellen, no. 147 (1995), pp. 9–13, and codified his modifications in his Handbuch der ägyptischen Königsnamen (Mainz, 1999), pp. 192, 200. Insofar as his comments relate to Pedaste, the adjustments he proposes seem problematic and have not been generally accepted. In short, he distinguished two kings named Usermaatre Pedaste by laying great emphasis on the implication of the epithets Son-of-Isis and Son-of-Bastet. The earliest becomes Usermaatre Pedaste/Usremaatre Pedaste Son-of-Isis, called Pedaste 1, and is made the late-ninth-century king ruling from Thebes during the period von Beckerath designates as Dynasty 22-A; he suggests Usermaatre Pedaste Son-of-Bastet is the later king, ruling in the north from the middle of the eighth century (ca. 755–730 B.C.) as part of a late Dynasty 23. Historical considerations aside, this argument is not tenable in relation to the style of the statue in question here, which belongs squarely in the late ninth century, as will be discussed below; it is also not supported by the relief depiction preserved on one of the stele in question. In fact, on historical grounds, von Beckerath later revised his views (see note 26 below).


monument of an important official of Pedubaste is added to the existing evidence concerning geographically situated monuments that reflect the king’s power base. Jansen-Winkeln suggests Hermopolis as a possible candidate for that power base.


27. SEM examinations and EDS analyses were carried out by Mark T. Wypyski, Research Scientist, Department of Scientific Research, Metropolitan Museum.

28. Examination of thin sections of the core materials was carried out by James H. Frantz, Research Scientist, Department of Scientific Research, Metropolitan Museum, who, in his previous position as Conservator in charge of the Sherman Fairchild Center for Objects Conservation, gave his full support to the technical research, which the authors thankfully acknowledge. George Wheeler, Research Chemist in the Department of Scientific Research at the Metropolitan Museum, also contributed to the examination of these thin sections.

29. This estimate is based on the proportions of a Third Intermediate Period bronze male figure, Pachasou (Musée du Louvre, Paris, E 7693, from Saqqara, h. 47.0 cm), with a distance between hipbone to midknee of roughly 30 percent of its total height, as measured from a profile-view image (see Figure 32, below); see also p. 184 below.

30. This seems unlikely, as the core material in this area clearly was not exposed to an oxidizing environment during casting; see pp. 171–73 below.

31. See p. 173 below.

32. The following handwritten text can be recognized on the larger label: “Egyp[t]e . . . 23 dyastische/787 – 747 av. J. Chr./C’est Comte Grégoire Strogonoff/Rome/. . . lvd. (?)/ Müller/. . . 612/. . . 2.” The figure “8” on the second line is a correction of another number that was scratched out. The spelling of the seller’s name here does not correspond to how it appears in the 1921 sale catalogue; see note 2 above.

33. Smith and Edwards, Ancient Egyptian Sculpture, pls. 22, 23.

34. See note 2 above for the Exposition Napoleon, Centre des Monuments Nationaux, MN 1357a.

35. The alloy composition of the chevrons is discussed below; see p. 177.


Because of a mix-up in the radiographs examined at the British Museum by Deborah Schorsch, the information about the core and core cavity in the figure of Thutmos IV provided by Hill is inaccurate. The cavity is large and relatively conformal, and there is no evidence as to how much of the core is extant.

38. Our understanding of ancient Egyptian bronze casting technology has improved in recent years as technical studies of different types of bronzes have appeared. Particularly useful are those that include radiographic images. See, for example, Delange, Statues égyptiennes du Moyen Empire, pp. 211–13 (Middle Kingdom private male); Hill and Schorsch 1997 (Thutmos III); Fishman and Fleming, “Bronze Figure of Tutankhamun” (late Amarna or post-Amarna period king); Aucontourier, Delange, and Meyohas 2004 (Karomama); Maarten J. Raven, “The Lady of Leiden: A Monumental Bronze Figure and Its Restoration,” in Aegyptus Musaeus Redivivus: Miscellanea in Honorem Hermannus de Meulenaere, ed. Luc Limme and J. Strybol (Brussels, 1993), pp. 129–37; Elisabeth Delange, Angélique Di Mantova, and Marie-Emmanuelle Meyohas, “Une extraordinaire statue de bronze dorée conservée au Louvre,” in Conservation in Ancient Egyptian Collections, ed. Carol E. Brown, Fiona Macalister, and Margot Wright (London, 1995), pp. 157–45; and Elisabeth Delange, Angélique Di Mantova, and John H. Taylor, “Un bronze égyptien mécenat,” La Revue du Louvre et des musées de France 48, no. 5 (December 1998), pp. 67–75 (Third Intermediate Period females); Taylor, Gadduco, and Shearan 1995, pp. 9–14 (Third Intermediate Period Osiris figures, females, male); Schorsch 1988, pp. 41–50 (animal sarcophagi); Patricia S. Griffin, “The Selective Use of Gilding on Egyptian Polychromed Bronzes,” in Gilded Metals: History, Technology and Conservation, ed. Terry Drayman-Weisser (London, 2000), pp. 49–72 (small-format Late Period works); Deborah Schorsch, “Technical Examination of Cat. No. 242,” in Hill 2004, p. 259 (forgery of a kneeling royal figure).

39. Further considerations relating to the manufacture of hollow-cast bronzes are outlined below; see pp. 173–74.

40. For internal metal walls across the top of the legs of a hollow-cast bronze cat sarcophagus, see Deborah Schorsch and James H. Frantz, “A Tale of Two Kitties,” MMB 55, no. 3 (Winter 1997–98), p. 23, figs. 10, 11, and also below, Figure 20.

41. Ancient Greek and Roman bronze founders, for example, routinely removed casting cores from hollow works.

42. Schorsch 1988, pp. 44–53.


44. For Egypt, see Josef Riederer, “Die Datierung ägyptischer Bronzehohlglüsse mit Hilfe der Thermolumineszenz-Analyse,” Studien zur altägyptischen Kultur 6 (1978), pp. 163–68, and Fishman and Fleming, “Bronze Figure of Tutankhamun,” p. 82.

45. The mechanism leading to the genesis of such finely divided copper particles, from which these minute spheres of corrosion would have developed, remains unexplained.

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46. See, for example, Delange, *Statues égyptiennes du Moyen Empire*, pp. 211–13, for a radiograph and description of the late Middle Kingdom private figure in the Louvre (E 27153). The use of this technique, known from ethnographic and contemporary workshop practices, is difficult to establish, as it often does not leave physical evidence.

47. While chaplets are generally made of metal, the use of thorns as core supports for hollow gold casts in the ancient Americas has been proposed on the basis of a sixteenth-century account of Aztec culture by Bernardino de Sahagún; see Dudley T. Easby Jr., “Sahagún Revisited in the Gold Collection of the University Museum,” *University Museum Bulletin* (University of Pennsylvania) 20, no. 3 (September 1956), pp. 4–5.


50. The earliest evidence of iron smelting in Egypt, dating to the sixth century B.C., was found by Petrie at the Greek settlement of Naucratis (William Mathew Flinders Petrie, *Naucratis*, pt. 1, 1884–5, Third Memoir of the Egypt Exploration Fund [London, 1886], p. 30).

51. The use of iron for the core supports was confirmed with EDS analysis. The sample analyzed was found to be a mixture of burial accretions and corrosion products, with an elevated iron content.

52. Henry Lie and Carol C. Mattusch in Carol C. Mattusch, with contributions by Beryl Berr-Sharrr et al., *The Fire of Hesperios: Large Classical Bronzes from North American Collections*, ex. cat., Arthur M. Sackler Museum, Harvard University Art Museum, Cambridge, Massachusetts, Toledo Museum of Art, Toledo, Ohio, and Tampa Museum of Art (Cambridge, Mass., 1996), nos. 39, 41, 43, 47. The earlier statement that core supports were first removed from castings in Renaissance times (Schorsh 1988, p. 43) is inaccurate.

53. It is unusual to find metallic iron core-supports on archaeological bronzes, as they generally corrode in situ, leaving holes in the bronze walls filled with corrosion products. In addition to iron’s inherent vulnerability to corrosive environments, iron core supports deteriorate far more quickly than the bronze walls around them because of their small size and large surface area—in later works, even relatively large ones, the supporters usually measure in section less than a millimeter—and because of the galvanic effect of the copper on the adjacent ferrous metal; Schorsch 1988, p. 44.


57. Archaeological Museum of Samos, Vathy: torso, B 1312 (Janzen, *Ägyptische und orientalische Bronzen*, pls. 1, 2); right leg fragments, B 1325 (pl. 4); B 879 (pl. 7); dress fragment, B 204 (pl. 6); torso, B 1364 (pl. 4). Deborah Schorsch had the opportunity to examine these works in the Vathy museum, thanks to the kind efforts of Dr.-Ing. Hermann Kienast, Deutsches Archäologisches Institut, Athens, and Günter Kopcke, Avalon Foundation Professor of the Humanities, Institute of Fine Arts, New York University.


59. Current whereabouts unknown, Late Period or later; examined and radiographed in the Metropolitan Museum’s former Department of Objects Conservation in 1990.

60. A second core support is visible in a radiograph taken from an oblique angle.

61. George Ortiz Collection, Geneva, h. 14.1 cm (without tenon); Madeleine Page-Gasser and André B. Weise, *Égypte, moments d’éternité: Art égyptien dans les collections privées, Suisse (Mainz, 1997), pp. 129–31, no. 78, as dating to the time of Amenhotep III. The figure was examined and radiographed in the Metropolitan Museum’s former Department of Objects Conservation in 1894–90.

62. A number of hammered patches are present, for example, on the left knee of the Saite Period bronze figure of a woman in the Gulbenkian Collection (400, h. 69 cm); Assam, *Collezione Calabrese Gulbenkian*, pp. 78–79, no. 23.


64. See note 49 above.

65. Richard E. Stone, Senior Museum Conservator in the Sherman Fairchild Center for Objects Conservation, helpfully pointed out the significance of this feature.

66. *Ägyptisches Museum, Berlin, 32521, find spot unknown, h. 69.5 cm; Biri Fay, *Egyptian Museum, Berlin*, 4th ed. (Berlin, 1990), pp. 113–14, no. 58, and for photographs of the entire statue from the front, back, and left side, *Burlington Magazine* 113 (June 1971), suppl., pls. II–IV.

67. E 7703, h. 95.5 cm; said to have been found with three other large bronze figures at Saqqara: Pachasou (see note 122 below and p. 185 with Figure 32); the so-called “Frère,” also in the Louvre (E 7692, h. 65.7 cm; see note 122 below); and a figure of Seth, reworked as Khnum(?), in the Ny Carlsberg Glyptotek, Copenhagen (AEIN 614, h. 70 cm), Mogens Jørgensen, *Catalogue, Egypt II (1550–1080 B.C.): Ny Carlsberg Glyptotek* (Copenhagen, 1998), pp. 340–41, no. 144, and also note 149 below.

68. The cutout might also have been intended to accommodate a hammered-in patch repair, but what is surely a cast-in repair is evident above his right hip. This is visible in an illustration on pp. 120–21 in *Encyclopédie photographique de l’art*, vol. 1, *Louvre* (Paris, 1935).


73. EA 22784/71459, said to be from Giza, h. 42 cm; Russmann, *Eternal Egypt*, pp. 219–21, no. 117. The dates ca. 945–915 B.C.
that appear at the beginning of the catalogue entry are typographical error and should read ca. 045–715 B.C.

74. See Taylor, Craddock, and Shearman 1998, pp. 12–13, for the analytical results for this figure, which contains only traces of tin and approximately 3.5 percent arsenic as well as 25 percent lead. High lead contents are also cited for two Third Intermediate Period Osiris figures (British Museum, London, EA 60718, h. 97 cm; EA 60719, h. 81 cm, both probably from the temple of Karnak); unfortunately, these bronzes have not been dated more precisely within the period.

75. As Vassiliká ("Egyptian Bronze Sculpture," n. 56) points out, numerous bronze figures in various German museum collections have been analyzed by Josef Riederer at the Rathgen-Forschungslabor, Staatsliche Museen zu Berlin, but published in a tabular form without reference to date or origin. In fact, the majority of these works, in common with most ancient Egyptian bronzes, do not derive from controlled contexts and have not been dated on stylistic or textual grounds.


77. See p. 178 below.

78. Ogden, "Metals," p. 152. See also Riederer, "Die naturwissenschaftliche Untersuchung der Bronzen," pp. 11–12, for a list of bronzes in the former Charlottenburg collection of the Ägyptisches Museum that contain more than 1 percent iron.


80. These include one of the Middle Kingdom hollow-cast figures said to be from the Fayum, a crocodile, mentioned above, note 36, and a solid-cast figure of a kneeling royal figure in the George Ortiz Collection; see Ortiz, In Pursuit of the Absolute, no. 37; see also Alessandra Giumi-Mair, "Das Krokodil und Amenemhat III. aus e-Fayyum: 𓰟𓰤𓰽𓰱-Exemplare aus dem Mittleren Reich," Antike Welt 27 (1996), pp. 313–21. Compare Hill and Schorsch 1997, nn. 47, 49–50.

81. Confirmed examples include the figure of Thutmose III in the Metropolitan Museum (Hill and Schorsch 1997) and the late Amarna or post-Amarna period king in the University of Pennsylvania Museum (Hill and Schorsch 1997, n. 39; Hill 2004, p. 235, no. 284, pl. 5).

82. A process similar to that employed in Japan to make the traditional artistically patinated alloy shakudo, was probably used to produce ancient black bronzes in Egypt and elsewhere in the Mediterranean world. For an explanation of the technique and color photographs of nonarchaeological black bronzes, see Ryû Murakami, "Japanese Traditional Alloys," in Metal Plating and Patination, ed. La Niece and Craddock, pp. 83–94, pls. 1–3, 7–1.

83. Examples of inlaid bronzes in the Metropolitan Museum that are not black bronzes include a kneeling figure of Amasis (MMA 35.9.3, h. 11 cm; Hill 2004, p. 166, no. 31, pl. 60) and seated and standing figures of Amun (MMA 58.17, h. 15.8 cm; 07.228.179, h. 31.2 cm; Deborah Schorsch, "The Manufacture of Metal Statuary in the First Millennium B.C.," in Gifts for the Gods, ed. Marsha Hill (forthcoming)).

84. Musée du Louvre, Paris, N.500, from Karnak, h. (with base) 39.5 cm. See Au Courtier, Delange, and Meyohas 2004 and below, p. 179 and Figure 25.

85. Ägyptisches Museum, Berlin, 23733, find spot unknown, h. 7.4 cm, w. 9.3 cm; Fay, Egyptian Museum, Berlin, pp. 116–17, no. 60, and below, p. 185 and Figure 35. We are very grateful to Dietrich Wildung, Director of the Ägyptisches Museum, for allowing Deborah Schorsch to examine this piece.

86. The use of black bronze as an inlay material on the figure of Karomama is discussed below, p. 178. In 1978, when the menat fragment was examined with atomic absorption spectrometry by Josef Riederer ("Die naturwissenschaftliche Untersuchung der Bronzen," p. 29, no. 105, s.v. "Platte"), gold was not among the elements routinely checked for in ancient copper-alloy works of art.

87. W. Andrew Oddy, "Gilding of Metals in the Old World," in Metal Plating and Patination, ed. La Niece and Craddock, pp. 171–81. For a recent study of gilding on Egyptian bronzes with a review of previous works, see Griffin, "Gilding on Egyptian Polychromed Bronzes."

88. A similar conclusion was reached for the kneeling bronze figure of a Kushite king in the Metropolitan Museum (2002,8) see Schorsch, "Manufacture of Metal Statuary."

89. The identity of these figures is discussed below; see p. 178.

90. For an illustration of this technique, see Ulrike Bunte, "Ziertechniken auf Bronzoeberflächen," in Archäologische Bronzen, antike Kunst, moderne Technik, ed. Hermann Born (Berlin, 1985), p. 63, fig. 11. The channels just inside the outlines of the chevrons, hieroglyphs, and deity figures are not usually seen in Egyptian metalwork. Compare the recessed fields for inlay on a bronze fragment illustrated in Élisabeth Delange, "Couleur vraie," in La couleur dans la peinture et l’emballage de l’Égypte ancienne: Actes de la Table Rond, Ravello, 20–22 mars 1997, ed. Sylvie Collinart and Michel Menu (Bari, 1998), pp. 17–30, pl. 2b, and similar channels on a black-bronze Roman plaque inlaid with gold in Giumi-Mair and Craddock, "Corinthia in E," pp. 23–26, fig. 11.

91. This technique is illustrated in Bunte, "Ziertechniken auf Bronzoeberflächen," p. 93, fig. 10.


95. Only a few of these Amarna Period red-gold objects have been analyzed; see Jack M. Ogden, “Gold in Antiquity,” Interdisciplinary Science Reviews 17 (1992), pp. 262-63, for a ring bearing the name of Akhenaten that contains about 20 percent copper. See also Deborah Schorsch, “Precious Metal Polychromy in Egypt in the Time of Tutankhamun,” Journal of Egyptian Archaeology 87 (2001), pp. 109-31, esp. pp. 67-69. Red-gold alloys are relatively rare, and the red coloration observed on ancient Egyptian gold is almost always unintentional in origin; James H. Frantz and Deborah Schorsch, “Egyptian Red Gold,” Archaeometals 4 (1990), pp. 133–52.

96. Stös-Fertner and Gale, “Chemical and Lead Isotope Analysis,” pp. 30b-7 and fig. 5, for analyses of several copper-rich silver-gold alloys dating to the New Kingdom and earlier, but without information about the type of objects from which the samples were removed.

97. Ibid., p. 308.


100. As the surviving gold leaf on the kilt was not analyzed, it is not possible to gauge its color with respect to the gold inlays.


102. Ibid., p. 13.

103. British Museum, London, EA 60939, h. 29.2 cm; La Niee et al. 2002, pp. 101-2, fig. 5, left and right. The latter image is a virtual color reconstruction of the bronze’s original appearance.

104. Ibid., p. 102. This suggestion is supported by the fact that facial markings on paired falcon representations are often indicated in a dark color.

105. What might be the earliest surviving use in Egypt of black-bronze inlays is seen on the small kneeling figure of the Dynasty 18 king Thutmose IV in the British Museum, where they were employed to outline the rims of the eyes and indicate eye contours; La Niee et al. 2002, pp. 99-101 and fig. 1.


107. Our rough sketch was redrawn and inked by Will Schneck.

108. Günther Roeder, “Die Arme der Osiris-Mumie,” in Ägyptologische Studien: [Hermann Graupen zum 70. Geburtstag gewidmet], ed. Otto Firchow (Berlin, 1955), usefully summarizes the best possibilities for the appearance of mumiform gods rendered in relief forms; see especially sec. 6 (pp. 257-62), sec. 5 (pp. 264-65), sec. 4 (p. 266), and p. 267.

109. The was is normally thought of as a divine scepter, but see Henry G. Fischer, “Notes on Sticks and Staves in Ancient Egypt,” MMF 13 (1979), pp. 21-23, and for the Third Intermediate Period, see, for example, Richard A. Fazzini, Egypt Dynasty XXII–XXV (Leiden, 1988), pl. 16, a relief scene in the Khonsu Temple at Karnak showing Osorkon III and the High Priest Tabeto III both holding the scepter.

110. The Brooklyn Museum, 57.92. Examination of the stone in its vitrine at the museum suggests that the goddess figure is human-headed but that the precious-metal inlay defining the upper edge of her wig has been lost. This condition gave rise to Lanzoni's original, and often repeated, description of the figure as cat-headed (R. V. Lanzoni, ‘Descrizione di un statuette di Usarka I,” Atti della R. Accademia di Torino 11 [December 1875], pp. 467-70). See also Hill 2004, p. 154, no. 10, with references to text discussion, pl. 11. A planned entry by Richard Fazzini in Gifts for the Gods, ed. Hill, promises more specific description and understanding of the statue.

111. Betsy M. Bryan, “Striding Glazed Statitic Figures of Amenhotep III: An Example of the Purposes of Minor Arts,” in Chief of Seers, ed. Goring, Reeves, and Ruffle, p. 67, interprets these as the vulture wings of Amun’s divine wife, Mut. Ancourtier, Delange, and Meyohas 2004, pp. 7-8, points out that the wings are composed of both vulture and falcon feathers and identifies the remains of a falcon head at the nexus of the wings in the center of the goddess’s back; compare the preserved inlaid falcon head on the back of the goddess Neith in Jantzen, Ägyptische und orientalische Bronzen, pl. 27, 28, and similar decoration on other divine statues.

112. For a discussion of the role of royal bronze statuary, see Hill 2004, pp. 121-42.


114. National Archaeological Museum, Athens, 110, find spot said to be near Xoi, h. 69 cm. Although named only as a priestess, Takshw was a female of considerable rank: she was a daughter of Akanosh, the Chief of the Ma in Sebenemos. Most recently, and with updated bibliography, Olivier Perdu, “La chefferie de Sebenemos de Phankhi à Psamétique Ier,” Revue d'égypologie 55 (2004), pp. 95-111, dates the statue to 670 B.C.

115. Gaston Maspero, “Lettre á M. François Lefournier,” Bibliothèque égyptologique 8 (1900), pp. 263, 265; also visible in Figure 27.

116. Ägyptisches Museum, Berlin, 2309, purchased by Heinrich Minutoli in Egypt before 1824 but find spot unknown, h. 57.5 cm; see discussion and illustrations in Günther Roeder, Ägyptische Bronzefiguren, Staatliche Museen zu Berlin, Mitteilungen aus der ägyptischen Sammlung 6 (Berlin, 1936), pp. 315-17, sec. 399a-c, and illustrations. Beginning with Dynasty 22, the presence of the henu bark of Sokar is hardly an indication of geographical origin, because the image gained new prominence on Theban coffins at this time; see, for particulars, John H. Taylor, “Theban Coffins from the Twenty-Second to the Twenty-Sixth Dynasty: Dating and Synthesis of Development,” in The Theban Necropolis: Past, Present and Future, ed. Nigel Strudwick and John H. Taylor (London, 2003), pp. 105 and 111 n. 156.

117. See note 73 above.

118. Musée du Louvre, Paris, E.10998, find spot unknown, h. 58 cm. The inscription on the front panel of the skirt mentions “Osiris in Rosetau.” This nomenclature does not always signal the Memphite area (Christiane M. Zivie, “Rosetau,” in Lexikon der Ägyptologie, vol. 5, ed. Wolfgang Helck and Wolfram Westendorf [Wiesbaden, 1984], cols. 303-9), but with the prominence of Memphite-area gods elsewhere on the statue, a Memphite or Saiskara origin is a possiblity.

119. The meaning of this figure is unclear. None of these statues cites a clear cultic association with Osiris. The small figure may be meant to mark the statue as “the Osiris,” but while some statues with the figures have inscriptions referring to the owner as “the Osiris” and/or “justified” (Meremun, Khon-
serdaisu), others offer no such designation (Pachasou and Ihat). One small probable Divine Consort has a figure of Osiris on her chest between the breast straps (British Museum, London, EA 54388; see Russmann, *Eternal Egypt*, pp. 217–18, no. 115). Taylor, *Theban Coffins*, p. 105, notes that the image of the goddess Maat occurs at the throat of some Third Intermediate Period coffins as a token of the Egyptian phrase ma-a-khu (true of voice), indicating a justified deceased person. This occurrence is, of course, facilitated by the affinities of Egyptian writing for substitutions by the rebus principle.


121. Musée du Louvre, Paris, N°3390, probably from Karnak, h. 82 cm; Delange, Di Mantova, and Taylor, "Un bronze égyptien méconnu," fig. 17 (height given as 84 cm), p. 73, and passim; Taylor, Craddock, and Shearman 1968, p. 14.

122. Christiane Ziegler, "Jalous pour une histoire de l’art égyptien: La statuaire de métal au Musée du Louvre," *Revue du Louvre et musées de France* 46, no. 1 (February 1996), pp. 34–35, fig. 12. "Le dnommé Mosou," *Bulletin de l’Institut Français d’Archéologie Orientale* 57 (1958), pp. 81–89, is the basic publication for identification and date; see also p. 184 and Figure 32. Some what atypically, the statue’s right arm is raised, although the leg strides forward; for comments on such occurrences, see Hill 2004, p. 72 n. 54. Not visible in published photographs are Pachasou’s other ornaments: a broad collar and at least on the right arm an armlet. The armlet, an encircling band decorated with an oval element between floral caps, is similar to scarab and seal bracelets of Sheshonq II (ca. 890 B.C.) and a bracelet of Wendjehamedjet (a contemporary of Pusennes I, ca. 1040–992 B.C.) that incorporated an agate head (Alix Wilkinson, *Ancient Egyptian Jewellery* [London, 1971], pp. 171–72; two of Sheshonq II’s bracelets are illustrated in color in *Tanis: L’or des pharaons*, pp. 263, 96, 295, no. 98.) Corrosion conceals much detail on the surface of the associated statue (Musée du Louvre, Paris, E7692, from the same Saqqara find, h. 65.5 cm; Ziegler, "Jalous pour une histoire de l’art égyptien," fig. 11). However, examination reveals the traces of a broad collar and a leopard-skin garment whose paw is still visible on the flat front area of the kil; no traces of a divine figure are discernible. Both statues are usually dated to the later Third Intermediate Period; see, for example, Christiane Ziegler, "Les arts du métal à la Troisième Période Intermédiaire," in *Tanis: L’or des pharaons*, pp. 85–101, esp. p. 92.


126. Archaeological Museum of Samos, B 2611, h. ca. 40 cm, features visible on the statue as displayed; the figure is briefly described but not illustrated in Kyrieleis, *Samos and Some Aspects of Archaic Greek Bronze Casting,* p. 24.

127. It may be better to think of these statues rather on the pattern of theophoric stone statuary, in which the depicted relationship to the gods is best interpreted as a wishful undertaking of the king’s role in the afterlife. Jacobus van Dijk, "A Ramesside Naophorous Statue from the Tei Pyramid Cemetery," *Oudheidkundige Mededelingen* (Rijksmuseum van Oudheden te Leiden) 64 (1984), pp. 49–60.

128. Priestly accoutrements and conventions do not align consistently enough with inscriptive evidence in the material discussed here to elucidate the question. A forthcoming dissertation by Barbara Mendoza at the University of California, Berkeley, on priestly bronzes will be useful in this regard. For the importance of temple roles and of bronze statuary, the large corpus of royal ritual statuary and female officials can be cited as one kind of evidence. For the interconnectedness of religious and political power in the period more generally, see, for example, the remarks of Karl Jansen-Winkeln, "Gab es in der altägyptischen Geschichte eine feudalistische Epoche?* Die Welt des Orts* 50 (1999), pp. 17–18.

129. For the association with the crowns, where the vulture and the falcon seem to function similarly as royal protective gods, see Emma Brunner-Traut, "Geier," in *Lexikon der Ägyptologie*, vol. 2, cols. 513–15. The vulture holding *shen* rings also appears on the area of the shoulder and upper arm of Takshut. On coffins, the same motif is seen, for example, on the breast of the silver coffin of Pusennes I (Pierre Montet, *La nécropole royale de Tanis*, vol. 2, *Les constructions et le tombeau de Pusennes à Tanis* [Paris, 1951], pl. 101), and a winged headdress (without the vulture’s head) occurs frequently on the heads of female coffins during this period as a derivative of the royal female vulture headdress; see John H. Taylor, *Egyptian Coffins* (Aylesbury, 1986), p. 51.


131. For the Abydos fetish as a secondary element in coffins, see, for example, George Daressy, *Cercueils des cachettes royales, Catalogue général des antiquités égyptiennes du Musée du Caire* (Cairo, 1909), pls. 25, 48, 57.


133. Bryan, *Striding Glazed Statuette Figures of Amenhotep III*., pp. 60–82. None of these examples includes the chevron-patterned belt, which seems replaceable by a belt with a rounded-feather pattern, the common zigzag pattern, and perhaps other variants. The examples in the full costume are
numbers 2, 4/5, and 7. See Wolhart Westendorf, “Panther,” in Lexikon der Ägyptologie, vol. 4, ed. Wolfgang Helck and Wolhart Westendorf (Wiesbaden, 1982), col. 664, regarding the religious assimilation of these felines.


135. For the complete feather-and-panther costume, see, for example, the statue of Ramesses III, Egyptian Museum, Cairo, CG 42130; Georges Lefrain, Statues et statues des rois et des particuliers, vol. 2, Catalogue général des antiquités égyptiennes du Musée du Caire (Cairo, 1909); another at the same king at Medinet Habu: Harold Nelson, Medinet Habu, vol. 4, The Festival Procession (Chicago, 1949), pl. 137; the tomb of Ramesses VI: The Tomb of Ramesses VI, trans. Alexandre Pankoff (New York, 1954), for example, pls. 34 and 62, where he offers to Osiris. In somewhat abbreviated form, elements of this costume appear fairly often in the royal tomb paintings of the Ramesside period at Thebes, for example, KV 57 (Horemhab) and QV 55 (Amennakhepshef, son of Ramesses III); see Bertha Porter and Rosalind L. B. Moss, Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs, and Paintings, vol. 1, The Theban Necropolis, pt. 2, 2nd ed. (Oxford, 1961), p. 628 (4) 4 and (4) 2, and p. 759 (8) 6, respectively.


137. Walters Art Museum, Baltimore, 54.2003, h. 17.7 cm; Hill 2004, p. 171, no. 44 (with references to text discussion), pl. 17. A kneeling king wearing a similarly patterned belt that is somewhat more sketchily rendered appeared recently at Sotheby’s, New York, pp. 26–27, lot 28, catalogue of the sale of December 7, 2001. For Osorkon I, see p. 179 and note 110 above.

138. See Pollak and Muñoz, Collection du comte Grégoire Stroganoff, pt. 1, by Pollak, pl. 28; Smith and Edwards, Ancient Egyptian Sculpture, pls. 22, 23, and Walker and Edwards, Egyptian Sculpture, p. 57. Plate 23 of Smith and Edwards is a side view that shows how far backward the bronze leaned when mounted in this way. John Walker of the National Gallery was apparently the only writer, viewing the work under these circumstances, to note its quality of movement: “This piece is remarkable not only for its fine modelling and its expression of movement . . . .” Walker and Edwards, Egyptian Sculpture, p. 13. Interestingly, in the Exposition Champollion, the statue was more appropriately displayed on a rod mount that allowed the torso to sit in a more upright position. See note 34 above for reference to a photograph.

139. Overall photographs of the Pedubaste torso were taken while the statue was fixed on its mount and were manipulated digitally to approximate as closely as possible its original stance.


141. See note 72 above.

142. MMA 26.2.1.412, find spot unknown, h. 17.5 cm; illustrated by Aldred, “Carnarvon Statuette of Amin,” pls. 1, 11, and II, a, and very frequently elsewhere; for color, see most recently Wilfried Seipel, Gold des Pharaonen (Milan, 2001), p. 199.

143. All these features recall those found on the feminized male figures of late Dynasty 18, including the king from the late Amarna or post-Amarna period, cited above in note 37, and also stone statuary such as the colossus of Tutankhamun and the statue of Pahh from his reign; Edna Russmann, Egyptian Sculpture: Cairo and Luxor (Austin, 1989), pp. 128 and 130, respectively.

144. Another example is Walters Art Museum, Baltimore, 54.2003; see note 137 above.

145. Known examples are Pepi I and the accompanying figure, which are in fact made of hammered copper, in the Egyptian Museum, Cairo; a Middle Kingdom king in the George Ortiz collection; another, smaller king from the same period in the Sammlung Ägyptischer Kunst, Munich; and a large bust, perhaps originally part of a statue, in the Roemer- und Pelizaeus-Museum, Hildesheim; see Hill 2004, p. 121.

146. Ibid., pp. 124–30.


148. There are two of these statues: Egyptian Museum, Cairo, JE 60709 and 60710. The first is illustrated and discussed by L. E. S. Edwards in Treasures of Tutankhamun, exh. cat., National Gallery of Art, Washington, D.C., and other institutions (New York, 1976), pp. 166–71, colorpl. 21; Edwards also considers the relation of such statues to the battle between Horus and the Sethian hippopotamus depicted at Edfu.

149. Stride angles of figures vary considerably, and the Amun is itself a boldly striding figure. Another work that might seem relevant to the consideration of other kinds of activities, the Ny Carlsberg Glyptotek Seth-Khnum (see note 67 above), is, unlike Pedubaste, strongly twisted through the waist and upper torso, as it leans backward in lifting its spear. This posture and an offset of its feet convey the vehemence of its activity. The stride, which cannot be meaningfully measured when the hips are twisted in this way, does not itself seem remarkable.


The relatively higher position of Karomama’s left breast is particularly evident in Tanis: L’or des pharaons, colorplates on pp. 177 and 179.

151. See note 122 above.

152. For a discussion of this phenomenon in kneeling kings and several factors that may lie behind it, see Hill 2004, p. 125.

153. Eaton-Krauss and Loeben, in “Louvre Statues of Sepa (A 36 and 37) and Nesames (A 38),” refer to examples of movement in statues facing the Old Kingdom. While it is generally stated that Egyptian striding stone statues rest their weight on the right rear foot, the statement is made mainly on the basis of Old Kingdom statues, and explanations for such a convention are given in terms of developments during that period, as Eaton-Krauss and Loeben do.
The evolution of post-Old Kingdom habits of representation in this respect needs further study. For example, a New Kingdom red granite striding statue of Thutmose III (MMA 14.7.15, h. 128 cm) shows the right rear heel far behind the center point of the body and nearing the rear edge of the back pillar, so that the king seems to be moving between his right and left foot (visible even in the indirect view in William C. Hayes, *The Scepter of Egypt*, rev. ed. [New York, 1990], vol. 2, p. 120, fig. 62). Dietrich Wildung, in furtherance of a project, first elaborated in "Bilanz eines Defizits," to reevaluate problematic conceptions about Egyptian art that deeply imprint scholarly discourse and observation, has for many years in lectures also pointed to instances in which the right heels of striding stone statues are placed near the rear edge of the back pillar, increasing the realistic impression of the stride.


For royal bronze statuary as ritual statuary, see Hill 2004, pp. 2–3 and passim. In addition, temple relief environments have been observed to interact with bronze production in certain respects (see Hill 2004, pp. 111, 145), so it is possible that the realistic depiction of movement in temple relief might have had an influence. For this and the increased importance of temples as art production centers in the first millennium in relation to other types of elite centers, see also Marsha Hill, "A Bronze Aegis of King Amasis in the Egyptian Museum: Bronzes, Unconventionality and Unexpected Connections," in *Egyptian Museum Collections around the World*, ed. Ekkamay and Trad, vol. 1, pp. 545–59.

Archaism, given the interest in Old Kingdom art during the later Third Intermediate Period in particular, could also be a factor in certain statues such as that of Pachasou, which does show the influence of Old Kingdom wood statuaries, where realistic depiction of actual movement is known.

155. The maten fragment is ascribed by the Berlin Museum to the Harsiese who was priest and king at Thebes (Fay, *Egyptian Museum, Berlin*, pp. 116–17, no. 60); for differentiation of Harsiese A (king and priest) from Harsiese B (high priest), see Jansen-Winkeln, "Historische Probleme der 3. Zwischenzeit," pp. 129–39. As noted by Jean Leclant, it is not at all clear that the royal (or divine?) figure represented on the maten should be identified with this King Hariese: first, the name faces the opposite direction from the figure; second, the individual's titles (priest, but also overseer of the city and vizier) do not seem to fit that particular person, whereas there are numerous Harsieses dating closer to the time of Dynasty 25, one with the same titles as those on the maten fragment ("Sur un contrepois de maten au nom de Taharqa: Allaitement et 'apparition' royale," in *Mélanges Mariee*, Institut Français d'Archéologie Orientale du Caire, Bibliothèque d'études 32 [Cairo 1951], pp. 251–84 and plates, esp. pp. 271–72 and notes). In this regard, see most recently Frédéric Payraudeau, "Harsiese: Un vizir oublié de l'époque ibyienne," *Journal of Egyptian Archaeology* 49 (2003), p. 205.


158. John H. Taylor, "Patterns of Colouring on Ancient Egyptian Coffins from the New Kingdom to the Twenty-Sixth Dynasty: An Overview," in *Colour and Painting in Ancient Egypt*, ed. Vivian Davies (London, 2001), pp. 164–81, has carefully examined basic aspects of the development of coffin painting during the period in question and would be a basic resource; see particularly his pp. 171–73 regarding the Dynasty 22 coffins. There are many unusual painted wooden stelae, such as Louvre E.52 belonging to the Lady of the House Taperet, that employ somewhat unusual effects and distinctive color palettes; for Taperet, see Guillaume Andreu, Marie-Hélène Rutschowscaya, and Christiane Ziegler, *L'Égypte ancienne au Louvre* (Paris, 1997), pp. 171–74.
I. A Giustiniani Bacchus and François Duquesnoy

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One of the most important events in the history of the collection of Greek and Roman Art at The Metropolitan Museum of Art was the acquisition in 1903 of a group of antique marbles from the famous Giustiniani collection in Rome. Created at the beginning of the seventeenth century by one of the wealthiest and most cultivated Roman bankers, the Genoese Marchese Vincenzo Giustiniani (1564–1637), the collection was among the largest in the Rome of the 1620s, under the pontificates of Paul V, Gregory XV, and Urban VIII. At the death of Giustiniani, in December 1637, it counted over 1,800 statues, busts, and reliefs, spread among his properties: the Giustiniani palace opposite San Luigi dei Francesi in the center of Rome, two large villas outside Porta del Popolo and near San Giovanni in Laterano, and his lands at Bassano di Sutri. Many of these antiquities came from collections assembled in Rome as early as the fifteenth and sixteenth centuries or were excavated during Giustiniani’s lifetime in the vicinity of the palace, in the remains of the Nero-Alexandrian Terms, built about 62 A.D. and restored in 225, not far from the Pantheon and the Church of Santa Maria Sopra Minerva.

Giustiniani, who died childless, tried to preserve the integrity of his collections of antiquities and paintings by leaving them to a distant relative and adoptive son, Andrea di Cassano Giustiniani, and by establishing in 1631 a comprehensive fideicomissum. But a gradual process of dispersion of the holdings began shortly after 1700, when his successors started falling on hard financial times. A number of sculptures were sold about 1720 to Thomas Herbert, eighth Earl of Pembroke (1654–1732), for Wilton House in England, while about the middle of the eighteenth century, several important Giustiniani marbles were purchased by the popes for the Capitoline Museum and for the new Museo Pio Clementino in the Vatican. The most conspicuous dispersion of the Giustiniani marbles took place, however, at the beginning of the nineteenth century, under Prince Vincenzo Giustiniani (1759–1826). Used first as collateral for a loan granted by the Torlonia bank, by 1816 a large number of Giustiniani marbles were claimed by Giovanni Torlonia and, after 1825, moved to Torlonia’s new museum at the Lungara. In the 1860s, amid the serious financial depression in the new State of Italy and the real estate crash that brought about the sale of some of the most prestigious princely Roman collections—the Boncompagni Ludovisi and the Borghese especially—the only survivors of the once famous Giustiniani collection were a small group of antiquities that remained in the palace near San Luigi dei Francesi. An inventory compiled in 1900 for the Ministry of Public Instruction listed an assortment of seventy-two sculptures, reliefs, heads, sarcophagi, and altars still in the palace, which their owners were anxious to put on the market.

The dealer to whom this sale was entrusted was the well-known Giuseppe Sangiorgi, who had organized the auctioning of a number of works from the Borghese collection in a sale held at the Villa Borghese in 1892. The reputation of the vast collection of Cypriot antiquities brought to the Metropolitan Museum by its first director, General Luigi Palma di Cesnola, and acquired by public subscription in 1874–76, was well known to European scholars and dealers, and the rapid growth of the fledgling American institution was much anticipated. On July 8, 1902, Sangiorgi, following the advice of a Dr. R. J. Nevin who was living in Rome and acting as an agent for the Metropolitan, wrote to the president of the Museum, Frederick W. Rhinelander, offering a group of antique marbles from the Giustiniani palace. He stressed the importance of the acquisition of such antiquities and asked Rhinelander to support the matter with General di Cesnola. Promising to send photographs as soon as possible, Sangiorgi added that he would also send two volumes of the Galleria Giustiniana, a seventeenth-century collection of engravings, which he wished to present to the Museum’s library. In spite of the documented provenance of the Giustiniani marbles offered by Sangiorgi, the Museum’s decision to purchase them was not an easy one and took most of the
fall of 1902 to reach. At a first meeting held in September, the Trustees decided to turn down the acquisition. This was much to the disappointment of Cesnola, who felt that at least some of the pieces were quite desirable for the Museum’s archaeological collection, which lacked examples of Roman classical statuary. Cesnola’s objections and Rhinelander’s support prompted the creation of a special committee charged with reviewing the matter and obtaining further information as to the character and value of the marbles.

This time, after consulting some of the Roman eighteenth-century descriptions of the Giustiniani palace and the engravings in the *Galleria Giustiniana*, and even asking the opinion of a well-known expatriate American sculptor living in Rome, Moses Jacob Ezekiel (1844–1917), the committee decided to recommend the purchase of the sculptures for the sum of $55,000. The only condition added to this recommendation, dated November 17, 1902, was that the purchase price not be charged to the Museum’s acqui-
Rihelander's interest in accomplishing the purchase of the Giustiniani sculptures prompted him to turn for help to a long-standing friend, Mary Clark Thompson (1835–1923), who had recently lost her husband, Frederick Ferris Thompson (1836–1899), a highly successful New York City banker and a generous philanthropist. Learning about the Museum's need to raise funds for the acquisition of the Giustiniani marbles, Mrs. Thompson agreed to buy and present them to the Museum for a sum not to exceed $60,000, to be paid in three installments following the arrival of the sculptures at the Museum.

On July 8 the crates containing the Giustiniani marbles arrived in New York, and on October 26, 1903, Cesnola could report to the Trustees that the Museum had received a total of thirty-four Roman statues, busts, and reliefs generously purchased and presented to the Museum by Mrs. Clark Thompson in memory of her husband.9
With the arrival of the marbles at the Museum, responsibility for their examination and for selecting those that would be desirable for the Museum fell to the curator of the Department of Sculpture F. Edwin Elwell. As the sculptures were found to have suffered considerable damage in the course of transportation from Rome, and decisions had to be taken as to the possible removal of the large number of restorations to which they had been subjected in the seventeenth century, almost a year passed before a conclusion was reached on these points. In September 1904 Rhinelander came to see the marbles and expressed his desire that they be left in the form in which they appeared in the engravings of the Galleria Giustiniana and as they had been bought by Mrs. Thompson. But after the sudden death of Rhinelander, followed a few days later by that of General di Cesnola, in November 1904, no further action was taken for some time.

It was only in May 1905, after the election of J. Pierpont Morgan as president of the Museum and the appointment of Sir Purdon Clarke as the new director, that the Giustiniani marbles could be reviewed and reevaluated. That task fell to Edward Robinson, a highly respected archaeologist who had started his career at the Museum of Fine Arts in Boston and now came to the Metropolitan Museum to start reorganizing and developing the collection that in 1909 became known as the Department of Greek and Roman Art.

Upon Robinson’s advice, of the thirty-four marbles from the Giustiniani Collection shipped to New York and paid for by Mrs. Thompson, the Museum decided to keep and exhibit only a group of eleven statues and six busts. Of the remaining seventeen marbles, four statues were donated by Mrs. Thompson to Williams College and three statues and one bust to Vassar College, while three sculptures, seven busts, and three reliefs were shipped to her country home at Canandaigua, New York, in upper Ontario County.

In the first issue of the new Bulletin of The Metropolitan Museum of Art, Robinson published a list of the seventeen marbles that were to become the nucleus of the Museum’s new collections of Greek and Roman sculptures. Almost all of them were engraved in the first volume of the Galleria Giustiniana and listed in the standard nineteenth-century archaeological refer-
ence works of Clarac and Matz and Duhn. Most of the statues had been extensively restored in the seventeenth century, and as Robinson quite perceptively noted, “They reflected almost as much the taste and archaeological knowledge of that period as they do the spirit of antiquity.”

In order to preserve the historical interest of the sculptures, which were soon put on exhibition in the new galleries of the Museum, their restorations remained undisturbed for an entire generation. It was not until 1939, under the curatorship of Gisela M. A. Richter, that the Giustiniani marbles were thoroughly reexamined and restudied to keep in step with the progress of modern archaeological inquiry and in preparation for her forthcoming Catalogue of Greek Sculptures. In this context, most of the Baroque restorations were removed, except for those, indeed quite extensive, of a Bacchus Seated on a Panther (Figures 1, 2), engraved in the first volume of the Galleria Giustiniana, as plate 139, by Cornelius J. Bloemaert (1566–1651) after a drawing by François Perrier (1594–1649) (Figure 3).

The group depicts a youthful Bacchus seated on a small panther. His torso turned in sinuous contrapposto toward its head, his right arm leaning upon the head of the animal, who seems to submit to the will of its god. Crowned with grapes, Bacchus looks dreamily down toward the panther; his left arm bent forward, he holds a bunch of grapes, a symbol of his divine intoxication (Figure 4). The god’s elongated limbs and the nearly feminine beauty of his physiognomy contrast with the geometric firmness of his unusually small carrier, a feline caryatid as it were, whose posture is underlined by the incongruous support of the diminutive altar under its belly, which has a dedicatory inscription to Serapis and Isis.

The first modern scholar to discuss the group was Margaret Bieber in the entry accompanying the Bruckmann photographs published first in 1940 and then in 1947. Bieber called the sculpture a “Pasticcio aus 3 nicht zusammengehörigen Teile,” consisting of the torso of a Dionysos, the torso of an animal of prey, and the altar with a dedicatory inscription to Serapis and Isis, which was probably added in the eighteenth century to give support to the group. Richter’s entry on the group states that its only ancient parts are the torso of a Dionysos with part of the right arm, the torso of a panther, and the inscribed altar. She further added that “to judge by the strong torsion of [Dionysos’] body, the original Greek work of which our torso is a Roman copy, must have been a Hellenistic creation.”

Figure 5. Seated Dionysos. Marble. Philadelphia, University of Pennsylvania, University Museum (photo: University of Pennsylvania Museum, Philadelphia)

The most recent discussion of the Giustiniani group was published by Giulia Fusconi, A. Canevari, and L. Buccino in 2001. As far as its composition is concerned, Buccino points out its resemblance to a particular sculptural type of seated Dionysos (the so-called “Philadelphia Dionysos”) that was known in the seventeenth century through several Roman versions. Among these was the eponymous group once in the Collegio del Nazzareno in Rome and now in the University of Pennsylvania Museum in Philadelphia (Figure 5) and a famous group sketched in 1572–77 by Pierre Jacques in the Della Valle collection (Figure 6), purchased in 1584 by Ferdinando de’ Medici, who installed it in his villa on the Pincio and in 1616 transferred it to the Uffizi in Florence.

A recent technical examination of the Giustiniani group (see Conservation Report that follows this article) has established that it is made up of several separate elements. The figure of Bacchus consists of a torso composed of two ancient fragments, carved of Pentelic marble and completed in the seventeenth century by the head and limbs carved of Carrara marble. The panther has an ancient torso also of Pentelic marble, completed in the seventeenth century by the head and legs carved of Carrara marble. The small altar with a dedicatory inscription to Isis and Serapis is also of Pentelic marble, but it is unrelated to the group and was probably added about 1700 to support the weight of the figures. The ensemble stands on an oval molded marble plinth also dating probably to about 1700.

Seen as a combination of ancient and modern parts, the Giustiniani group reveals an unusually subtle and complex effort at integration on the part of the seventeenth-century sculptor responsible for its restoration. The sitting pose of the god, his right leg extended forward while the left one is slightly raised, seems indeed to be based on the profile of the Della Valle and Nazzareno figures. But analysis of the design of the upper part of the figure, with its handsome, classicizing head and the contrapposto movement of its shoulders, leads us in a different direction.

Especially telling is the sculptural quality of Bacchus’ head and face (Figure 7). His regular, sensitive features are carved with unusual softness of touch, and their melancholy expression is underlined by the slight inclination of his head. The lyrical character of Bacchus’ traits is further enhanced by his elaborate hairdo, crowned with a wreath of grapes and vine leaves, its long, wavy strands of hair gathered in a knot just above his nape (Figure 4). The classical source for the type used for the young god is easily identified with that of the so-called Antinous (Figure 8), which at the beginning of the seventeenth century was in the statue court of the Vatican Belvedere. On the other hand, the elaborate headgear that here has replaced the short cropped hair of the Belvedere Antinous is not unlike that worn by the young god in the many late antique Dionysiac reliefs depicting the procession of his Indian Triumph.

Figure 7. Detail of Figure 1, showing head of Bacchus

Figure 8. So-called Antinous, detail, 4th century B.C. Marble, h. 1.95 m. Musei Vaticani, Rome (photo: Alinari/Art Resource, N.Y.)
ish sculptor François Duquesnoy (1598–1643). In two of his marble reliefs dating from late 1620s, \textit{Divine Love Overcoming Profane Love} in the Galleria Doria Pamphili in Rome (Figure 10) and the \textit{Monument for Adrian Vrulh rá (1628–29)} in Santa Maria dell’Anima (Figure 11), we find a very similar way of interpreting sculptural forms, a lyrical and pictorial style that we recognize again in Duquesnoy’s famous statue of Santa Susanna in Santa Maria di Loreto (Figure 12), modeled in about 1630 and completed in marble in 1633.²³

Duquesnoy’s accomplishment as a restorer of antiquities was praised by both Bellori²⁴ and Passeri²⁵ for its exceptional quality and subtle perfection. Shortly after 1621 when, after the death of Archduke Albert, Governor of the Southern Netherlands, Duquesnoy lost his source of income, the young Fleming had to rely on his talent as a restorer, working for such Roman collectors as Filippo Colonna, Ippolito Vitelleschi, and Alessandro Rondinini. For the impressive \textit{Dancing Faun}, restored for the Rondinini collection and now in the Victoria and Albert Museum (Figure 13), Duquesnoy seems to have been inspired by a similar faun in the Giustiniani collection²⁶ with which he must have been familiar even before 1629. In that year, the sculptor was introduced to Vincenzo Giustiniani by the German painter and engraver Joachim von Sandrart (1606–1688), who had recently arrived in Rome and who became one of Duquesnoy’s closest friends and supporters.²⁷ It may have been under the influence of Sandrart, who lived in the

Figure 9. Detail of Figure 1, showing head of panther

The variety of classical sources used by the sculptor-restorer and his refinement in the treatment of surfaces, as we notice not only in the face of Bacchus but also in the soft handling of the panther’s head (Figure 9), remind us most compellingly of the works of the Flemish sculptor François Duquesnoy (1598–1643). In two of his marble reliefs dating from late 1620s, \textit{Divine Love Overcoming Profane Love} in the Galleria Doria Pamphili in Rome (Figure 10) and the \textit{Monument for Adrian Vrulh rá (1628–29)} in Santa Maria dell’Anima (Figure 11), we find a very similar way of interpreting sculptural forms, a lyrical and pictorial style that we recognize again in Duquesnoy’s famous statue of Santa Susanna in Santa Maria di Loreto (Figure 12), modeled in about 1630 and completed in marble in 1633.²³

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Figure 10. François Duquesnoy, Detail of \textit{Divine Love Overcoming Profane Love}, ca. 1629. Marble. Galleria Doria Pamphili, Rome (photo: Rome ICCD Fototeca Nazionale)

Figure 11. François Duquesnoy, Detail of \textit{Monument for Adrian Vrulh rá (1628–29).} Marble. Santa Maria dell’Anima, Rome (photo: Rome ICCD Fototeca Nazionale)
Figure 12. François Duquesnoy. Detail of Statue of Santa Susanna, 1630–33. Marble. Santa Maria di Loreto, Rome (photo: Anderson)


Figure 14. François Duquesnoy. Mercury and Cupid. Modeled in Rome, ca. 1629–33. This bronze cast probably in the 18th century. Bronze, h. 62.2 cm. Huntington Library, San Marino, California (photo: Henry E. Huntington Library and Art Gallery)
Giustiniani palace from 1632 to 1635 and helped the marquise manage his collection, that Vincenzo Giustiniani asked Duquesnoy for a small bronze group of *Mercury and Cupid* (Figure 14) to be executed as a pendant to a fine Greek bronze statuette of a standing Hercules resting from his labors.

The group of *Mercury and Cupid*, which is known today through six bronze replicas in various collections,\(^8\) shows Mercury leaning against a tree trunk that is slightly curved downward and gazing at a small cupid sitting at his feet, who looks up at him as he ties a pair of wings to the god’s ankle. The introspective pose of Mercury, his bent left arm holding the caduceus and his right arm leaning in counterweight on the tree, is easily recognizable as a close variant of the composition of our Bacchus leaning on a panther. The bronze statuette commissioned by Giustiniani was probably executed by Duquesnoy between 1629 and 1635, since in October 1634 Claude Mellan was paid for engraving a copper plate after Duquesnoy’s design for the *Galleria Giustiniana*, vol. 1, pl. 84 (Figure 15).\(^9\)

During the mid-1630s Duquesnoy must have been one of the favorite sculptors employed by Vincenzo Giustiniani to restore the antiquities that he was anxious to have engraved as the plates for his *Galleria*. In a recently discovered ledger of payments made out by the marquise to the draftsmen and engravers working on this project,\(^9\) the names of several sculptors are also included. Among them are Pietro and Gian Lorenzo Bernini, Giuliano Finelli, and François Duquesnoy. On December 8, 1635, a payment was recorded to Michel Natalis for having engraved a copper plate with a drawing representing an antique Bacchus that François Duquesnoy “was in the process of restoring.”\(^3\) The sculpture, a standing *Bacchus Raising a Cup of Wine*, was engraved after a drawing by the Flemish painter Carl Philips Spierinck (ca. 1600–1639), as specified on the print that appears as pl. 69.
in the Galleria Giustiniana (Figure 16) and as recently identified by Silvia Danesi Squarzina.\textsuperscript{32}

The marble standing Bacchus, included in the nineteenth century in the large Giustiniani sale to the Torlonia bank, was published in the catalogue of the Torlonia Museum in 1884–85 (Figure 17).\textsuperscript{33} Although now inaccessible for a thorough examination, the head of the Torlonia sculpture, with its delicately classicizing traits and elaborate crown of vine leaves, seems to offer a striking comparison with the head of the Metropolitan Museum Bacchus.

The stylistic similarity between the two marbles suggests that Duquesnoy was at work on both in the course of 1635. The date is confirmed by an entry in the same ledger of payments in which Cornelius Bloemaert’s engraving of the group of “Bacchus seated on a tiger” (sic) (Figure 3) is mentioned as “di commissione del Signor Vincenzo.”\textsuperscript{34} From its wording it would appear that the group was probably the very last restoration executed for the marquese, just before the publication of the first volume of the Galleria in 1638 and his death in December 1637.

In accordance with Vincenzo Giustiniani’s will, a detailed inventory of all his belongings was drawn up in February 1638.\textsuperscript{35} In the Palace of Sant’ Eustachio, the greatest number of antiquities, 247 according to the inventory, were displayed in the large two-story-high vaulted gallery on the piano nobile,\textsuperscript{36} while other sculptures were installed in various nearby rooms and on the ground floor. Here, in one of the rooms close to the courtyard and the door leading to the Rotonda, was found the Bacchus Raising a Cup of Wine,\textsuperscript{37} which, as noted, had been restored by Duquesnoy, along with the Bacchus Seated on a Panther.\textsuperscript{38} Both sculptures were described in the same location in the inventory after the death of Andrea Giustiniani in 1677 and in that of his son Carlo Benedetto, who died in 1684.

Since soon after 1677 the palace was restructured and enlarged under the direction of the little-known architect Domenico Legendre, who constructed a large staircase next to the courtyard, we can assume that many of the sculptures were moved in the early eighteenth century.\textsuperscript{39} According to several eighteenth-century guidebooks to Rome\textsuperscript{40} the group of Bacchus Seated on a Panther came to be installed on the third landing of the main staircase.

In 1705, in the fourth competition held after the Clementine reorganization of the Accademia di San Luca and the institution of the yearly competition, the Concorso Clementino, the Bacchus group as well as two other marbles, an Apollo and a Reclining Woman, standing on the third-floor landing of the staircase in the Giustiniani palace, were assigned to the third-class candidates who were asked to draw them in red chalk.\textsuperscript{41} Four students of painting received prizes. Paolo Filocamo from Messina (Figure 18), Henry Trench from Ireland, Alessandro Discenet from Rome (Figure 19), and one Boetio Leonelli from Manuppelli near Chieti. All four drawings show the group of Bacchus Seated on a Panther installed as it is now on a low oval molded base carved of white marble with grey parallel veins (probably of Bardiglio or Serravezza origin). Different in profile from the flat, rectangular base depicted in the Bloemaert engraving in the Galleria Giustiniana (Figure 3), this oval marble platform was probably added about 1700 when the sculptures were moved upstairs. Confirming that the small altar was added to the Bacchus group about the same time, a schematic rendering of it
appears in the drawing submitted by Alessandro Discenet (Figure 19).

Although in the first half of the eighteenth century, the artists studying the sculptures in the Giustiniani Palace were few, a frequent visitor was Edmé Bouchardon (1698–1762). While in Rome as pensionnaire at the French Academy from 1723 to 1732, Bouchardon made a number of red-chalk drawings of the Giustiniani sculptures. One drawing after the Bacchus Seated on a Panther (Figure 20) is now in the Louvre.49 Drawn slightly from below, as Bouchardon saw the group on the staircase, its harmonious outline stresses the sculptor’s interest in the elegant eurythmy that Duquesnoy had so eloquently brought out in his restorations. Another Bouchardon drawing, slightly varied, was focused on a frontal view. Both were engraved by Johann Justin Preisler for a collection of fifty notable antiquities printed in 1732 for the notorious German antiquarian and secret agent Philipp Baron von Stosch, who was living in Rome between 1722 and 1731.

About the middle of the century, the Giustiniani Palace, with its antiquities displayed in the courtyard, the staircase, and the grand gallery on the piano nobile, became more frequently visited by foreign writers and scholars, as well as artists.

In 1756 Johann Joachim Winckelmann, while surveying the collections of antiquities in Rome, where he had arrived a year before, noticed the Bacchus group on the staircase of the Giustiniani Palace. Its modern head struck him for its fine quality; as we read in his notebook: “Auf der Treppe. Der Kopf des Bacchi der auf einen Tiger sitzet, ist neu, aber sehr gut; nur mit einer etwas ernsthaften Mine.”44

After about 1760, the second edition of the plates of the two volumes of the Galleria Giustiniana, printed by Carlo Losi in Genoa from the copper plates preserved in the Giustiniani family, revived the reputation of the Giustiniani antiquities in Rome, encouraging students and artists to seek permission to draw after the sculptures left in the palace.45 It is not surprising, therefore, to find keen interest among the Roman

Figure 18. Paolo Filocamo (Italian [Messina], active 18th century). Red chalk drawing after Bacchus Seated on a Panther, 1705. 79 x 54 cm. Accademia di San Luca, A 184, Rome (photo: Accademia Nazionale di San Luca)

Figure 19. Alessandro Discenet (Italian [Rome], active 18th century). Red chalk drawing after Bacchus Seated on a Panther, 1705. 36 x 54.5 cm. Accademia di San Luca, A 186, Rome (photo: Accademia Nazionale di San Luca)
Neoclassical artists, especially those in the circle of Felice Giani (1758–1823).

Giani lived in Rome from 1780 to 1786. Among his closest friends was Franc Caucig (1755–1828), a Slovene painter who shared with Giani a similar Neoclassical inclination. Many of their drawings in pen and ink are preserved in the Lanciani collection in the library of the Istituto Nazionale di Archeologia e Storia dell’Arte in Rome. In one of these sketchbooks (MSS Lanciani 35) we find 167 drawings in pen and ink copied from classical sculptures in Roman collections. A number of them are after Giustiniani marbles, such as the Bacchus Seated on a Panther, a particularly fluid pen-and-wash arabesque-like drawing (Figure 21) typical of the style of Franc Caucig.16

Appreciated by artists both foreign and Italian,17 the Giustiniani composition also attracted the attention of gem engravers. One of them was Giovanni Pichler (1734–1791), who transformed the subject from Dionysos Seated on a Panther into that of a Hermes Sitting on a Ram, as shown in a glass-paste gem preserved in the Staatliche Münzsammlung, Munich (Figure 22).18
The attribution of the Giustiniani Bacchus Seated on a Panther to François Duquesnoy adds significantly to his reputation as a restorer of antiquities, a reputation that, as we have seen, was fully confirmed by Bellori's and Passeri's biographical accounts.

ACKNOWLEDGMENTS

I should like to thank De Abramitis for the care with which she has undertaken her analysis of our Giustiniani Bacchus. Its results have added very much to my understanding of Duquesnoy's sophistication in the restoration of antiques.

On the documentary side, I owe many thanks to Jeanie M. James and Barbara W. File for guiding me through the Metropolitan Museum Archives, as well as to Carlos A. Picón, Joan R. Mertens, and Elizabeth J. Milleker in the Greek and Roman Department for their interest in the interdepartmental aspect of my work. In Rome, where my visits coincided with the Giustiniani exhibitions, I should also like to thank for their help Silvia Danesi Svarzina, Giulia Fusconi, and Ilaria Toesca.

Finally, I am grateful to James D. Draper for pointing out to me Schadow's drawing in Berlin and the Pichler glass-paste gem in Munich.

NOTES

20. See later p. 269.
22. An early Antonine example, now in the Capitoline Museum, where it was moved in the eighteenth century from the Vatican
Belevedere (Friedrich Matz, Die dionysischen Sarkophage, pt. 3 [Berlin, 1969], pp. 307–8, no. 162, pl. 185); and a famous late Severan relief with the Triumph of Dionysus and the Seasons, from Badminton Hall in Gloucester, England, presumably found in Rome (Anna M. McCann, Roman Sarcofagi in The Metropolitan Museum of Art [New York, 1978], pp. 94–106, no. 17, fig. 114).


28. For the latest discussion of these replicas, see the entry by M. Boudon in Caravaggio e i Giustiniani, ed. Danesi Squarzina, pp. 338–41, no. E2.


31. Ibid., p. 433, no. 209: “E a di d. [8 dicembre] scudi ottu pagati a Michel Natale per aver intagliato in rame un disegno di Bacco antico che restaura Franco famigno per la Gallaria.”


33. Carlo Lodovico Visconti, I monumenti del Museo Torlonia riprodotti con la fototipia (Rome, 1884), pl. VI, no. 22.

34. Gallottini, “Documenti di pagamento delle matrici,” p. 436, no. 274: “1638. E a 18 marzo scudi ventiquattro m.ta pagati a Cornelio Bloemart per aver intagliato due rami della Gallaria ... l’altro un Bacco antico che sta a sedere sopra una tigre di comiss.ne del Sig. Vincenzo.”

35. A transcription of the 1638 inventory is in Gallottini, Le sculture della collezione Giustiniani, pp. 79–117.


37. Listed as no. 622 in the inventory of 1638 (Gallottini, Le sculture della collezione Giustiniani, p. 97).

38. Listed as no. 625 in the inventory of 1638 (ibid., p. 98).

39. For this history of the architectural transformations of the palace following the projects of Legendre, see I. Toesca, “Note sulla storia del Palazzo Giustiniani a San Luigi dei Francesi,” Bollettino d’arte 42 (1957), pp. 301–2; and Alessandro Ippoliti, Il restauro di Palazzo Giustiniani (Rome, 2000), p. 23.


43. Johann Justin Precisler, Statuae Antiquae ab E. Bouchardon Delineatae (Nuremberg, 1732).


47. The Giustiniani Bacchus also attracted the attention of the German Neoclassical sculptor Johann Gottfried Schadow (1764–1850), when he spent two years in Rome from 1785 to 1787. A black chalk sketch after the Bacchus, shown sitting on a rock rather than on a panther, is today in Berlin at the Stiftung Archiv der Akademie der Künste (Schadow in Rom: Zeichnungen von Johann Gottfried Schadow aus den Jahren 1785 bis 1787, exh. cat., Casa di Goethe, Rome, and other locations [Berlin, 2003], p. 55, pls. 83–84, no. 36).

II. Conservation Report, *Bacchus Seated on a Panther*

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As discussed in Olga Raggio’s accompanying article, this statue is a seventeenth-century work of artistic restoration of ancient fragments that was created in its current form in Rome in or about 1635. It is composed of four ancient fragments that were assembled and augmented in the seventeenth century in order to create a complete sculpture. Metropolitan Museum records note that the statue was among the pieces that were damaged in 1903 during transit from Italy to New York. One may assume that multiple other damages also occurred in the centuries prior to its acquisition by the Metropolitan. The most vivid example of former damage is the loss of the panther’s raised proper right front paw, which was represented in the seventeenth-century engraving in the *Galleria Giustiniana* (Figure 3) but appears to have been missing by the time of the Bouchardon chalk drawing (Figure 20).

The four ancient portions of the sculpture include the two sections that make up the torso of Bacchus, the torso of the panther, and the supportive inscribed altar (Figures 23, 24). For many years it was assumed that the torso of Bacchus and that of the panther were unrelated, although both date to antiquity. Close visual examination reveals the remains of an original marble protrusion or lip on the back of the panther in the area of the seated figure (Figure 25), indicating that something originally sat on the animal’s back. Sections of this protrusion are visible both in the front of the sculpture below the restoration of the proper right thigh of Bacchus and on the back of the sculpture. Evidence of a matching protrusion is visible at

Figure 23. Sculpture in Figure 1, with seventeenth-century restorations noted in a striped pattern and the eighteenth-century base noted in a dotted pattern

Figure 24. Back of sculpture in Figure 1, with restorations designated as in Figure 25
the bottom of the center of the buttocks of Bacchus, indicating that he, too, was joined to another marble element. The surfaces of the protrusions on both figures display evidence of ancient burial and do not appear to have been recarved as part of the later restorations. The contours of the sides of the join of the figures match very closely (Figure 25). This evidence leads to the assumption that Bacchus and the panther were, in fact, joined in antiquity.

This hypothesis was recently confirmed by stable isotope ratio analysis that was undertaken on stone samples from the lower edge of the torso of Bacchus and an adjacent edge of the panther. The analysis indicates that these two portions of the sculpture were most probably carved from a single block of marble from an ancient quarry on Mount Pentelikon, near Athens. Hence the scientific evidence provides further proof that Bacchus and the panther were carved together as part of the same original ancient sculpture.

Examination reveals that there is no physical indication that the supportive altar is original to the sculpture. The top edge of the altar is covered with a twentieth-century fill material, whereas the lower part of the panther appears to be a carved surface, hidden by the altar. In fact the aforementioned engraving does not include an altar. The altar stone was analyzed by stable isotope ratio analysis and found to be from a different ancient quarry on Mount Pentelikon that may have supplied stone of lesser quality than the block used to carve the figural elements. The carving and condition of the altar indicate an ancient date, and radiographs of the area give further evidence that it was added after the seventeenth-century restoration (gamma radiography discussed in more detail in later paragraphs). The head, arms, and legs of Bacchus and the head and legs of the panther appear to have been carved as part of the seventeenth-century restoration. Samples of this marble (taken from the head and the proper-right leg of the Bacchus) were found to be from the Carrara quarries in Italy, as one would expect during this time period. The carving and condition of the marble base on which the figures are mounted do not appear to be seventeenth century, and in fact research indicates that the base was made about 1700 to replace the flat rectangular one shown in the Bloemaert engraving.

It is notable that the seventeenth-century Italian restorer did not remove all traces of burial accretions from the surface of the ancient sculpture through acid cleaning or some other comparable method used in restoration in the past. Traces of an iron earth pigment (identified using polarizing light microscopy) remain on the deerskin that Bacchus wears. This pigment is found under the burial accretions that remain on the surface. There are, however, areas near the joins where the restorer has carved into the ancient sculpture in order to unite it visually with the adjoining restorations, such as the texture of the tooth chisel that extends onto the ancient back of the nebris near the seventeenth-century left shoulder (Figure 26). The lower part of the ancient belly of Bacchus was repolished, perhaps to visually harmonize it with the seventeenth-century legs, although the back and the buttocks were left with a more intact burial surface.

There are scattered areas of compensated loss present, primarily found on the ancient torso of Bacchus and at the joins between the fragments. A sample of material taken from the proper-right chest area join was identified using Fourier-Transform Infra-Red Spectroscopy (FTIR) and found to be wax, probably
beeswax, with a small amount of calcite (such as chalk or marble dust) present. These fills are consistent with the materials known to have been used in seventeenth-century restoration. Even today they are well integrated into the surrounding marble surfaces and give an idea of how visually united the ancient and modern portions of the sculpture would have been at the time of the Baroque restoration. The wax compensations have been lost from many of the joins, such as in the fill in Bacchus’ right arm and in the panther’s legs. In areas where the wax has been lost, there is a more recent compensation technique that was left recessed and toned to a neutral but quite visible hue. X-ray diffraction (XRD) has identified the material used as a lime plaster. This type of fill is seen on many sculptures at the Metropolitan Museum and hence may have been executed during the early MMA repairs to the sculpture.

The wax loss compensation is most readily visible when viewed under ultraviolet light (Colorplate 21). The largest fill comprises the proper right eye and forehead of the deer head of the nebris and bridges the gap between the two sections of the ancient torso on Bacchus’ chest. There is a wax fill approximately 3 cm by 3 cm along the lower edge of the nebris on Bacchus’ stomach. It appears to be covering a loss in the stone, similar to the loss slightly below. There are several more small (1 to 0.5 cm) fills in the area below the above-mentioned one. There are wax compensations at the edge of the nebris, near the proper left underarm extending over the join of the ancient and modern torso. There are bits of wax that remain intermittently along this join. There is a 1 by 1.5 cm wax compensation on the proper left hand of Bacchus, adjacent to the knuckle of the middle finger that fills a small indentation toward its thumb. There is another 1 cm by 1 cm fill on the back of the proper right arm, just above the join between the ancient and modern sections.

A sample of a dark brown material that appears to be a seventeenth-century adhesive was taken from under a plaster fill at the neck and at the end of the drilled hole for the lost proper right front leg of the panther. The material was analyzed using FTIR and found to be a natural resin, such as rosin (solubility tests together with ultraviolet fluorescence rule out shellac), melted with marble dust. This material is consistent with what one would expect to have been used to join stone fragments in the seventeenth century. The plaster fill at the neck appears to be part of a recent Museum repair. Also present at the neck is a cementitious material that fills small holes in the ends of the locks of hair. Again, this material is seen in other sculptures that were restored at the Museum and in this case probably fills drill holes that were made during the seventeenth-century restoration but subsequently deemed unnecessary after the pins were lost.

Gamma radiographs using a Cobalt 60 source were taken of most of the areas of joins of the sculpture in an effort to determine the restoration pinning techniques (Colorplate 22). Legible images of most of the pins were obtained. Some generalities are apparent. No lead is visible in the radiographs, which suggests that either a resin or possibly a plaster compound was used to secure the pins. At the base of the cavity on the torso of the panther in the area of its missing front paw is a material that has been identified using FTIR as a natural resin such as rosin. This would likely indicate that the material used as the adhesive for the pins is such a resin. Some pins have an uneven density and an irregular contour, indicating that they are
hand-wrought iron and most likely part of the seventeenth-century restoration (Figure 27). Others appear to be extremely straight with severely cutoff ends, with notches cut into the sides, and these may date to the MMA restoration, since such pins were commonly used in early Museum repairs (Figure 28). Some of the pins that are visible in radiograph are not sufficiently clear to characterize them in any particular time frame. Many of the MMA pins appear in the limbs in sets, a larger and one or two smaller set parallel in the join, whereas the remaining ones are set with a single pin to secure the join. Small pins approximately 1 cm in diameter are visible at several of the joins, such as in the neck of the panther, the neck and torso join of Bacchus, and in the join of the torso of the panther to the restoration of the proper-left rear leg. These may have been part of the seventeenth-century restoration and may have been used to help hold in place larger areas of fill, such as in the ends of the locks of Bacchus’ hair, where the pinning cavities are now filled with cement.

Figure 27. Gamma radiograph of detail of Figure 1, showing wrought-iron pins

Figure 28. Gamma radiograph of detail of Figure 1, showing MMA pins

Figure 29. Gamma radiograph of torso and altar of Figure 1
The radiograph taken of the large pin that joins the two torsos and the pin that extends from the panther into the altar shows very different characteristics (Figure 29). The pin uniting the two torsos has an irregular contour and fits closely into its drilled cavity. The one that extends from the panther into the altar looks wider and has much straighter edges. The pinning cavity at the underside of the panther is very wide, and the internal end of the hole is quite accurately cylindrical, leading one to believe that it was drilled with a modern drill bit and that the pin therefore represents a more recent addition. This evidence bolsters the argument made above that the altar is not part of the seventeenth-century restoration.

There is a marble insert in the front of the statue on the right thigh of Bacchus, approximately 9 cm by 12 cm. There is another in the back of the left upper arm, approximately 7 cm by 13 cm, and yet another in the back of the left side of the waist, approximately 8 cm by 15 cm. The marble inserts in the limbs are most likely due to damage after the seventeenth-century restoration, which was caused by breakage of the marble in the area of the pins that was subsequently repaired. The insert in the back represents a fill between the two sections of the ancient torso of Bacchus and seems likely to have been executed at the time of the seventeenth-century restoration.

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NOTES

1. Discussion with Olga Raggio.
2. Samples taken by the author and analyzed using stable isotope ratio by Dr. Norman Herz, Professor Emeritus in the Department of Geology, University of Georgia.
3. FTIR and XRD analysis performed by George Wheeler, Research Scientist, Department of Scientific Research, Metropolitan Museum.
William Rush’s *Eagle* for St. John’s Evangelical Lutheran Church, Philadelphia

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The acquisition of William Rush’s *Eagle* (Figure 1, Colorplate 26) in 2002 presented an opportunity for Metropolitan Museum curators and conservators to examine methodically this monumental gilded wood sculpture. The importance of Rush’s imposing *Eagle* within the contexts of this artist’s varied oeuvre and early-nineteenth-century American sculpture has long been recognized. However, recent discoveries regarding its construction, surface treatment, and installation history offer new technical and historical insights, especially regarding the still unresolved issue of whether the orb on which the eagle is perched is original to the sculpture or was added after it was installed in Independence Hall in 1847. When considered in conjunction with the *Eagle’s* impeccable provenance and extensive documentation, these findings allow for a comprehensive reassessment of this icon of Federal-era Philadelphia, the first sculpture by Rush to enter the Museum’s collection.

In 1809, St. John’s Evangelical Lutheran Church in Philadelphia commissioned Rush (1756–1833) to create a decorative eagle for installation above the sounding board surmounting its pulpit. St. John’s originated in 1806 and was incorporated in 1808, the country’s first Lutheran congregation established specifically to conduct services in English rather than German. The congregation’s first building, located on Race Street between Fifth and Sixth streets, was designed by Frederick Graff (1774–1847), a member of the church. Graff is best known as the architect and engineer of Philadelphia’s Fairmount Waterworks (1812–25), for which Rush and his son John (1782–1853) created sculptures to adorn the millhouse entrances. As the St. John’s trustees’ minutes for January 4, 1808, record, its building committee aspired to construct:

...a Church as they believed would best satisfy the expectation of the Congregation, combining in some measure elegance with utility while a strict eye was to be had to economy in all their arrangements as far as it could with propriety—while on the one hand they were willing to build substantial, on the other they were for introducing nothing extravagant or superfluous. The Federal-style brick structure was completed and dedicated in 1809, but the program of interior embellishment continued for several years. Following the principle of uniting “elegance with utility,” the building committee opted to put the pulpit at the center of the east wall, one of the longer sidewalls, in order to accommodate a larger number of parishioners. The elevated pulpit had a communion table and reading desk in front of it, as is recorded in Reuben S. Gilbert’s 1829 watercolor of the interior of St. John’s (Figure 2). In addition to creating the *Eagle*, Rush carved the chancel’s decorative woodwork behind the pulpit—four Corinthian pilasters, which in paired sets flanked a blind arch above the pulpit. Rush’s ensemble, designed by Graff, is now in the collection of the Philadelphia Museum of Art. The son of a ship’s carpenter, William Rush was a well-connected Philadelphia citizen. In addition to his cultural and artistic involvements, he took part in local government, serving on the Common and Select councils of Philadelphia from 1801 to 1826. Rush was an established member of Philadelphia’s vibrant community of artisan wood carvers and gilders, respected for his ship figureheads and public allegorical sculptures. Thus he was an appropriate choice for this prominent ecclesiastical commission. The order from St. John’s came at a point in Rush’s career when he was a mature artist, making the transition from a carver of figureheads to a sculptor of architectural designs and a modeler of portraits. This transition was made not only out of artistic ambition but also by dint of necessity, since in 1807 the Embargo Act, prohibit...
ing export of American cargo to foreign ports, had put a sudden halt to the shipbuilding industry. Rush filled the void, in part, by earning commissions for several important Philadelphia churches.\(^8\) In addition to the St. John’s work, he carved crucifixes for two Catholic churches, St. Augustine’s, around 1810, and St. Mary’s, in 1811–12.\(^9\) In 1812 he also completed three allegorical sculptures—Praise, Exhortation, and Cherubim Encircled by a Glory—to decorate a new organ in St. Paul’s, an Episcopal congregation.\(^10\)

Rush presented a bill, dated June 10, 1809, to St. John’s for seventy dollars for “Carving a large Eagle” and “Making Mould for Iron Work” (Figure 3). The draft for payment, written on the same sheet of paper, was signed by trustee John Hay on November 8, 1809. It requested that the trustees “will please to draw an order for the above bill.” By spring 1811, as church minutes for April 6 document, “Mr. William Rush done the carving of the eagle. Cost $70.”\(^11\) The massive Eagle, with an impressive wingspan of over 1.5 meters, served as the principal artistic adornment for this expansive classicizing space that accommodated 1,300 worshippers.\(^12\) Situated directly above the pulpit and sounding board, the dramatic sculpture, with its highly active outline, towered above the St. John’s congregation.

The original symbolism of Rush’s Eagle was entirely ecclesiastical, as the attribute of the congregation’s patron saint, John the Evangelist. The eagle became associated with John as a symbol of the particularly divine and inspired words of his gospel. On a more general level, because eagles fly higher than other birds, they were traditionally seen as both nearer to God and the heavens and symbolic of Christ’s ascension and resurrection. In the Renaissance it was also said that eagles could look at the sun without being
blinded. Hence, they could face the word of God. The second major element of this sculpture, the orb, also carries iconological meaning since the eagle positioned on an orb signifies God’s sovereignty over the world. Lecterns and pulpets, from which the gospels are read, often incorporated eagles with outspread wings. Indeed, there is a history of lectern eagles associated with orbs, as carved European examples suggest. In the case of St. John’s, the eagle was positioned dramatically above the pulpit, representing the written and spoken word.

Rush’s Eagle is a significant departure from its stiffer, more heraldic forebears of both European and American origin. His representation is realistically avian, with wings partially unfolded, the body crouching and poised for flight. The feathers are rendered
Figure 4. Detail of Eagle in Figure 1, illustrating the sculptural qualities of the lower mandible and the transition between metal and wood. Note the perpendicular groove in the iron half of the bill, as well as the hooklike tongue that would have secured the chain connected to the sounding board.

Figure 5. Charles Willson Peale (American, 1741–1827) and Titian Ramsay Peale II (American, 1799–1855). The Long Room: Interior of Front Room in Peale's Museum, 1822. Graphite and watercolor on paper, 52.7 x 35.6 cm. The Detroit Institute of Arts, Founders Society Purchase, Director’s Discretionary Fund, 57.261 (photo: © 1990, The Detroit Institute of Arts)
with individualizing detail, providing careful structural and textural differentiation between the longer, attenuated primary feathers and the smaller ones comprising the wing lining and torso. These heavy, rounded feathers—especially on the wings—are rather more decorative and stylized, suggestive of flora rather than fauna. But in the Eagle’s overall structure, it is the realistic elements that prevail, such as the incised pupils and irises, which underscore the bird’s predatory nature and keen vision (Figure 4).

Rush’s attempt at a naturalistic representation of the eagle must be seen in the broader context of Philadelphia’s groundbreaking role in the study of the natural sciences in the eighteenth and nineteenth centuries and, specifically, in light of the sculptor’s close association with painter-naturalist Charles Willson Peale (1741–1827). In 1786, Peale had founded his Philadelphia Museum, where he displayed his painted portraits of national personages (including Rush) and a collection of natural specimens arranged according to Linnaeus’s taxonomic classification. In addition, several portrait sculptures by Rush were exhibited, as documented in 1822 by Peale and his son Titian Ramsay Peale II in a graphite and watercolor rendering of the museum when it was located in the Long Room of Independence Hall (Figure 5).

Given their lengthy association, it is reasonable to speculate that Peale advised Rush on the St. John’s commission. During his long and varied career, Peale had tried his own hand at sculpting, and the two men collaborated on several sculpture-related projects. Rush may have referred to one of Peale’s American bald eagles for his carved representation—by 1811 Peale had collected more than 1,000 bird specimens. A caged live eagle was a vociferous fixture at Peale’s Philadelphia Museum for some fifteen years. After its death in 1805, Peale prepared the specimen with its wings spread (Figure 6).

Although a number of carved wood eagles have been attributed to Rush over the years, the Metropolitan’s is the only one that can be firmly documented. A second eagle, of about 1810 (Figure 7), traditionally assigned to the sculptor, has been in the collection of the Pennsylvania Academy of the Fine Arts since 1922, the gift of Wilson Mitchell. This work lacks an earlier established provenance; however, it may have served as the stern ornament for a ship since it is a frontal high relief. Rush scholar Linda Bantel attributed the Academy sculpture to Rush on the basis of stylistic and technical commonalities with several documented pieces, including the Metropolitan’s Eagle. The two birds share similar carving patterns, including the distinct differentiation between areas of the wings—the longer, quill-like primaries and the fuller, shorter feathers comprising the wing linings. Furthermore, the execution of both eagles’ feathers is in keeping with those of the contemporaneous winged angels Exhortation and Praise that Rush completed for St. Paul’s Church. Likewise, the Metropolitan and Academy eagles share the sculptor’s characteristic...
treatment of eyes, with deeply carved-out pupils and incised lines around the irises. These distinctive mannerisms appear throughout Rush’s work, from the few early identified figureheads to the later, more plentiful portrait busts in both wood and terracotta. While the Academy and Metropolitan eagles remain the only two examples widely accepted by scholars today, other candidates continue to be put forth on the basis of provenance and/or stylistic resemblances.\textsuperscript{24}

**Construction**

The Metropolitan’s Eagle consists of four major sections of wood—two wings, the torso, and the globe—all of which have considerable mass. Rush’s sculpture has been regilded several times over the course of the last two centuries, and the accumulation of finish layers not only softens its features more than originally intended but also makes it more difficult to determine whether these four sections are each pieced together from smaller elements, or if they are carved out of solid lumber. On the body and wings, possible indicators—such as surface fractures that occur where segments would have been glued together—are mostly obscured by the build up of layers. X-radiography did not reveal any indication of glue joints within the eagle’s torso, leaving open the possibility that it was carved out of a single tree trunk, although this seems unlikely.

The directions of the wood grain in the wings and torso are more or less parallel to each other, running in a longitudinal direction, from beak to tail. This situation causes a problem where the torso and wings meet, as the use of traditional wood joints would be structurally insufficient. Even the employment of dowels would have resulted in almost immediate rupture at these locations due to the torsional strain caused by the wide wingspan. Instead, Rush opted for an iron armature that could withstand the physical forces introduced by the design and sheer size of the sculpture, thus theoretically eliminating the need for any type of wood joinery (Figure 8). Examination of the Eagle confirmed this supposition, resulting in the interesting conclusion that the armature must have been made first and the roughed-out sections of wood for the wings and torso mounted to it, before the actual carving began.
X-radiography of the orb revealed that it is a hollow structure, composed of seven layers of wood blocks (Figure 9). This construction is quite complicated as well as unexpected, and it must have been chosen to give the sphere as little weight as possible. The radiograph in Figure 9 also reveals the presence of roughly fifty nails that help stabilize the stratification, and which presumably were introduced only after the globe was turned on a lathe with a rather large clearance. These nails have many orientations, and the different silhouettes captured on the film offer information about technical features and, therefore, help to narrow down the approximate age of the fasteners. On the basis of the angular nature and regularity of the shape of the heads, as well as the fact that the shafts taper only on two of their four sides, it seems that the nails, including the L-shaped heads, were machine cut from sheets of metal. Mechanized nail-manufacturing technology developed rapidly between 1795 and 1810, starting with hand-headed varieties in the early stages. By 1811, however, when Rush’s sculpture was completed, entirely machine-cut nails were readily available, and this variety remained in common use until the wire nail was introduced at the end of the nineteenth century.\textsuperscript{26} There is the possibility that the nails are not original to the globe but, instead, date to an early restoration. A rather similar nail can be recognized in the X-radiograph of Figure 12, which seems to relate to the repair of a split in the eagle’s beak.

Armature

Gilbert’s 1829 watercolor of St. John’s—the only extant view of the interior (Figure 2)—depicts the Eagle mounted on top of the blind arch on the chancel wall, with a long iron chain suspended from its open beak to support the sounding board over the pulpit. It is most likely that the sounding board was, in fact, attached to the wall. Thus this rendering may not offer conclusive evidence of the original installation scheme. Furthermore, the space above the Eagle is not depicted, allowing for the possibility that the sculpture was suspended from the ceiling rather than mounted on top of the blind arch.

To facilitate the complicated installation at St. John’s, as well as to allow for the unprecedented naturalistic representation of an eagle in flight, Rush designed an ambitious armature that was fabricated by the Philadelphia blacksmith John Goodman Jr. (see Figure 8). The structure consists of three axes: the first element is a curved bar that braces almost the entire width of the top of the wings, the second runs along the eagle’s back, and the third is a round rod that cuts vertically through both the eagle’s body and the orb below it. Goodman’s name is stamped twice into the upper surface of the crossbar (Figure 10). It seems all but certain that John Goodman Jr., the blacksmith, was also the first president of St. John’s, in which capacity he signed numerous invoices and minutes relating to the trustees activities.\textsuperscript{26} Goodman’s contribution to the Eagle would have been only appropriate since other members of the congregation, including the architect Graff, were involved in the construction project.\textsuperscript{27} An 1809 receipt, now in the Philadelphia Museum of Art, catalogues Goodman’s many contributions, among them: “... Sundry works for Pulpit etc. viz a band over base of Eagle; Sundry heavy and light work, a plate for washer + ring; Sundry Works for Canopy—Chain for Canopy—a clamp with eight screws for eagle...” \textsuperscript{28}

The specificity of this entry, dated June 8, suggests that the Eagle’s mounting system was well advanced conceptually prior to the sculpture’s execution. Furthermore, at the time Rush had formally earned the commission from the St. John’s trustees, he was already anticipating the necessity of Goodman’s armature, as indicated by the mention of the “Mould for Iron Work” in the bill of June 10, 1809. It is possible that this foresight was based on his experience with the conception of the Pennsylvania Academy’s Eagle. Even though the Academy’s example has a more vertical stance, the similar composition of the two eagles must have brought to bear identical structural problems. To compensate for these, Rush had experimented with an armature on the Academy eagle,
consisting of the less sophisticated but equally effective application of two metal strips across the back and wings, fastened with screws (Figure 11).\textsuperscript{39} On the Metropolitan’s \textit{Eagle}, both wings are secured to the stamped brace with wrought iron carriage bolts that penetrate the wood from below and are locked in place with large, square nuts.\textsuperscript{39}

Apart from withstanding the physical forces of a considerable wingspan, the \textit{Eagle’s} armature also had to sustain the weight of the chain connected to the sounding board, which would have been a substantial burden even if the eagle carried the canopy only in an illusionistic sense. The longitudinal arm of the armature consists of a double-curved iron bar that runs from the end of the tail, through a cut-out groove in the eagle’s back, and penetrates the base of the skull to emerge at the front as the lower mandible (Figure 12).\textsuperscript{31} This ingenious solution to the problem of carrying the weight of the chain was executed in a way that is visually satisfying as well, since the end of the iron bar has been given a naturalistic appearance and the transition between metal and wood was skillfully resolved. A perpendicular groove in the lower half of the beak could signify a wear pattern, caused by decades of carrying the chain of St. John’s sounding board, but more likely it was fabricated by Rush and Goodman to help hold the chain in place. The uppermost link was secured by the red-painted tongue, made of a separate piece of iron shaped like a hook. Similar features are found on the Academy \textit{Eagle}, which also includes a seemingly original wire loop that allows for an object—a chain, a branch, or a banner—to be mounted on or from the lower mandible, again suggesting that this work may be a precursor to the St. John’s \textit{Eagle}.

The vertical element of the armature was installed for the purpose of solidly positioning the orb directly underneath the eagle’s talons (see Figure 8). This iron rod, approximately twenty millimeters in diameter, pierces the body of the eagle, passes between the feet, where several inches of it are exposed, and continues...
through the center of the orb to end just below its bottom surface. The two elements of the sculpture were firmly secured by tightening the large nut at the top end. Using the eagle’s talons as stabilizers, the eagle and the orb are joined in an extremely effective fashion. A second nut, or possibly a solid head, at the other extreme of the iron rod is hidden from view by a fairly large, square wooden plug, the outline of which can be easily recognized in the gilded surface at the bottom of the orb. In order to position the Eagle at an appropriate angle, a paddle-shaped, iron element was created. The broad end receives the vertical arm of the armature, while the narrow end is simply wedged below the bar that supports the wings (Figures 8, 13). At the center of this cross piece is a large metal eye, which forms the point of attachment from which the Eagle can be suspended, as it is now in the Charles W. Engelhard Court in the Museum’s American Wing.

Wood identification

Four samples were taken from the sculpture for the purpose of wood identification: one from the top of the right wing, one from the feathers of the left leg, and two from the orb. All samples were found to be of the same species of coniferous wood, containing resin canals, but without spiral thickenings in its longitudinal tracheids. Ray tracheids were observed to be non-dentate, while the cross-field pits are fenestriform. Based on these microscopic features, the samples were identified as belonging to the white pine group (Pinus, subgenus Strobus), which includes sugar pine (Pinus lambertiana), western white pine (P. monticola), as well as eastern white pine (P. strobus). The different species of this group cannot be separated on the basis of cellular morphology alone; however, given the origin of the sculpture it seems reasonable to assume that the Eagle was made of eastern white pine, as this is the only major white pine species that grows on the east coast of North America.

Polychromy

A considerable amount of information about the Eagle’s finish history was derived from cross sections prepared from various samples. Apart from bronze paint that was applied locally to retouch the surface, the eagle’s body and wings are consistent with each other in the stratification of their finish (Figure 14, Colorplate 23). Some ten samples were taken in order to arrive at representative results, and they show that, with the exception of the top surface of the wings, the eagle has been completely water gilded at least four times. The alloys found in the four extant layers of gold leaf all contain gold, silver, and copper, although the earliest layer had a much larger gold component than the others, while the last application contained a high percentage of copper. The second and third layers of leaf were practically identical in composition,
but clear differences between the layers of bole onto which they are applied would seem to rule out both belonging to the same gilding campaign. Variations in composition between the yellow layers of bole, observed with polarized light microscopy, were substantiated by electron dispersive spectrometry (EDS) analysis. True bole consists of a fine clay that is usually yellow or red in color and is applied as a substrate for the application of gold leaf. Based on their aluminum, silica, and iron content, the yellow layers that are positioned directly below each layer of gold on the *Eagle* all contain a fair amount of clay, but three of these also have been pigmented with chrome yellow. A sample taken from the inside of the beak revealed that, in this location, the current top layer of red paint was introduced only at the time of the fourth gilding campaign, as three layers of gold leaf were found below it. Polarized light microscopy identified the red pigment present in the paint layer as vermilion but also revealed the presence of a top coat of tinted varnish, containing red lake, presumably applied to intensify the tonality of the polychromy.\textsuperscript{33}

**Orb**

A question that has long confounded students of the *Eagle* is whether the orb is original to the overall sculpture. Unfortunately, in spite of the extensive recent technical analysis and additional documentary findings, it is still not possible to date the orb more precisely or conclusively beyond its first appearance in an engraving of 1853 (Figure 18). With all the accumu-

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Figure 14. Cross section of sample B of the finish on *Eagle* in Figure 1, taken from the edge of one of the feathers at the back of the neck. A slight uncrossing of the polars of the microscope's analyzer emphasizes the reflection and orientation of four layers of gold leaf. Below each layer of gold, layers of yellow bole and white ground may be seen. See also Colorplate 23.

Figure 15. Max Rosenthal (Polish-American, 1833 – 1918). *Interior View of Independence Hall, Philadelphia*, 1856. Chromolithograph, 36.8 x 47.6 cm. Independence National Historical Park, Philadelphia, INDE 1396. The print records the *Eagle* in Figure 1 at the east end of Assembly Hall, above Rush's sculpture of George Washington (see Figure 16). Note Peale's stuffed eagle atop the Liberty Bell (see Figure 6).
lated evidence, one may still choose to argue the case one way or the other.

In the catalogue of the 1982 Rush exhibition Linda Bantel speculated that the orb was added at a later date. Her claim was based on such visual evidence as the Gilbert 1829 watercolor that clearly depicts the sculpture without an orb; she did not have the benefit of doing a technical examination of the piece. Oral tradition among the St. John’s congregation also supports the hypothesis that the orb was added during the Eagle’s tenure in Independence Hall, but, as previously noted, the orb does have specific ecclesiastical symbolism.

In 1847–48, extensive alterations were made to the interior of St. John’s, including removing and replacing the pulpit and sounding board. At a meeting held June 1, 1847, the congregation adopted a resolution: “Whereas—In the alterations now being made in our church edifice the Gilt Eagle will be removed not to be again placed in said building, [I]t is nevertheless as a beautiful specimen of the skill of the late worthy citizen and sculptor of Philad. Wm Rush worthy of preservation.” The board of trustees offered the Eagle to the City of Philadelphia with the caveat that it be placed in Independence Hall, several blocks away on Chestnut Street between Fifth and Sixth streets. Minutes of the city’s Select Council of October 7, 1847, document this event:

they have received from the Trustees of St. John’s Church the Eagle; and being a work of much merit, and the production of one of our fellow citizens who was distinguished above all others in this City as Sculptor, and who for many years was a zealous Council man, they have caused it to be placed in the Hall of Independence in an appropriate position, where, as the Nation’s emblem, it is a most suitable and graceful ornament.

Church minutes from February 1848 note that the Eagle, now “handsomely regilt,” occupied a “conspicuous place” in Independence Hall. As a chromolithograph of 1856 (Figure 15) by Polish-American artist Max Rosenthal records, the sculpture was installed at the east end of Assembly Hall, the space where the signers of the Declaration of Independence had convened in 1776, where the Constitution was drafted in 1787, and where Charles Willson Peale had once installed part of his Philadelphia Museum. Other objects in this gallery charged with potent national symbolism included the Liberty Bell mounted on a pedestal designed by Frederick Graff, Peale’s portraits of colonial and early national worthies, and Rush’s life-size wood statue of George Washington (Figure 16), which was painted white to simulate the more ennobling medium of marble. Atop the Liberty Bell, with its wings spread, sat Peale’s specimen of the American bald eagle, his former pet, albeit with the direction of its head reversed in Rosenthal’s chromolithograph (see Figure 6).

In its new location it was clearly intended that Rush’s Eagle would undergo an immediate and pronounced iconographic shift—from the traditional religious attribute of a patron saint to a secular icon of strength, patriotism, and independence. The American bald eagle had been adopted by the United States Congress for the national seal on June 20, 1782. The eagle soon became the most popular and patriotic of American decorative motifs, embellishing a wide variety of media—printed, impressed, stitched, cast, and

Figure 16. William Rush. George Washington, 1815. Carved and painted pine, h. 185.4 cm. Independence National Historical Park, Philadelphia, INDE 14419
carved. Early American renderings most often depict the eagle with its talons grasping an olive branch to symbolize peace and/or clutching a sheaf of thirteen arrows representing the original colonies. Symbolic articles on which eagles were typically perched included ribbons, shields, flags, snakes, and rocks. The orb made an early appearance in American visual iconography with a carved eagle (Figure 17) by Rush's well-known contemporary Samuel McIntire (1757–1811), originally sited on the roof peak of a Salem, Massachusetts, stable. Although most of McIntire's subsequent three-dimensional eagles were also positioned on orbs, the motif was far from standard in this country until later in the nineteenth century.

The first recorded image of Rush's Eagle installed in Assembly Hall is a print entitled The Hall of Independence, as arranged for the reception of the remains of the late Hon. John Quincy Adams. The depicted moment is February 1848, when John Adams lay in state in Philadelphia after he died as the result of a stroke suffered on the floor of the U.S. House of Representatives. The room is heavily shrouded in black bunting, including a drape hanging from the mouth of an orless Eagle, which had been installed above Rush's Washington sculpture only months earlier. The first irrefutable visual evidence of the Eagle with its orb is an engraved image in the New York Illustrated News of July 9, 1853 (Figure 18). In this image, the eagle firmly clasps the orb; a stream of ribbon, inscribed with scrolling script, is drawn through the iron hook of the tongue and extends the full width of the wingspan.

Visual examination of the orb would suggest that it is original to the Eagle. For example, even if the rendering of the talons is arguably a weak element, the relationship between bird and sphere is worked out in great detail. The position of the feet, with the left leg reaching backward in a very naturalistic manner, seems integral to the sculpture's original design, as even the pattern of feathers on the leg flows in a way that underscores this feature.

A comparison of the finish histories of the eagle and orb was not as conclusive as could have been hoped, although some surprising new information was found in the process. The two surfaces look dramatically different from each other, and this inconsistency has been used as an argument against dating the orb to 1809–11. Microscopic analysis of samples indeed confirms that the last surface treatment of the eagle consists of water gilding while oil gilding was found on the orb. The discrepancies between the current finishes, however, cannot be the sole basis on which the orb is dismissed as a mid-nineteenth-century addition. Were the orb not original to the Eagle, its finish history presumably would either vary considerably, or, at the least, should not include the earliest strata found on the eagle.

Five finish samples taken from the orb indicate that prior to the current oil gilding its surface may have been gilded once, previously, but not before a layer of
blue paint was applied (Figure 19, Colorplate 24). Reexamination of early depictions of the Eagle, including the Illustrated News engraving and especially the 1856 Rosenthal chromolithograph (the only known color rendering of Assembly Hall from this period), revealed the function of the blue paint. The orb was rendered as the Earth, with the North and South American continents oriented frontally. The landmasses, possibly executed in gold leaf, are set off against the world’s seas represented in blue. As a patriotic symbol, the eagle atop the globe now served as a visual metaphor for America as world power.

There was consistency in the cross sections of five samples taken from the orb, which suggests that the blue paint was part of the earliest finish scheme applied to the globe. However, conclusions on the basis of this evidence were possibly thwarted by information found in the cross section of a sixth sample (Figure 20, Colorplate 25). Taken from a fill in a split in the globe’s wooden substrate, its stratification shows remnants of
bronze paint below the blue paint layer, possibly implying that the globe has a finish history that goes further back than the polychromy depicting the world's continents. If this were true, the fact that the early traces of bronze paint are found only inside the split would indicate that the surface of the globe could have been completely stripped prior to the application of the blue paint. Acceptance of the fact that the polychromy on the globe was applied after the transfer of the Eagle to Independence Hall, combined with an earlier finish history, further strengthens the argument that the globe is original to the sculpture. Yet the remnants of bronze paint also could represent a later application that seeped into the crack in the surface. In this scenario, the finish history of the globe appears to start with the polychromy, which, in turn, would lead to the conclusion that the globe is not original to the Eagle.

Alterations

Aside from the possibility that the orb was added between 1847 and 1853, only a few alterations to the sculpture have been identified. The original tip of the eagle’s upper mandible was lost at an unknown date. A rather weak newer version was substituted, which lacks the crook that is characteristic of the beaks of birds of prey (see Figure 4). It was attached with the use of wire nails, suggesting that it is a replacement dating to the end of the nineteenth century or later.

The top right side of the eagle’s tail has a large rectangular recess that may be original, relating to the mounting system used in St. John’s (Figure 21). In the top left corner of this recess, a large bolt penetrates the end of the armature’s longitudinal arm. Conceivably, a separate piece of metal was screwed to the church’s wall and to the armature in order to secure the sculpture, whether it was mounted or suspended. Alternatively, the rather large scar in the tail could have been made for the purpose of installing the sculpture in Independence Hall, where it was mounted leaning on its tail and angled rather far upward, held in place by a chain connected to the wall. Contemporaneous prints and photographs corroborate that the sculpture was mounted to the wall in Assembly Hall rather than suspended from the ceiling. Currently, the ground surface of the recess is covered with a thin piece of modern painted plywood, covering up any markings that could reveal further information about the eagle’s earlier installations.

Changes to the inside of the bill, touched upon earlier, showed that the surface was originally gilded like the outside. Only with the third regilding was this altered by applying red paint. This rather intrusive choice enhances the sculpture’s naturalistic qualities.

Conclusion

In preparation for the nation’s centennial in 1876, Assembly Hall underwent extensive restorations to transform it into a space dedicated to the events that had occurred there in 1776. The Eagle and other relics were removed from the newly named “Indepen-
dence Chamber.” Before April 1874, the sculpture was placed in the museum of Independence Hall, “a very appropriate place,” according to one period account. Between 1896 and 1898 additional renovations took place to return the entire building to its appearance during the American Revolution. Following the restoration, the Eagle was “hung in the hallway of the east wing building [with] the most valued relics of Revolutionary and Colonial times.” The sculpture’s ensuing installation history is vague; it was displayed “first in one place and then in another,” as curator Wilfred Jordan aptly noted in 1913. At that point, he proposed having it conserved, regilded, and suspended from the ceiling in nearby Congress Hall. How far his recommendation went is unknown, for, in 1914, the trustees of St. John’s requested that the Eagle be returned to the church. The Select and Common councils of Philadelphia finally approved the transfer in April–May 1916: “Whereas, The eagle and ball have no bearing upon any event in American history, and the Independence Hall Advisory Board has no objection to their return to the Trustees of the Evangelical Congregation of St. John’s Church...” Presumably the sculpture was reinstalled in the original building of 1808. In 1924 this structure was demolished to accommodate an approach to the Delaware River Bridge (now the Benjamin Franklin Bridge) that opened to traffic in 1926. In 1928–29 St. John’s constructed a new building—a replica of the original—on Columbia Avenue near Sixty-first Street in western Philadelphia. There the Eagle was installed high over the right gallery, now carrying a dual symbolism, ecclesiastical and national.

St. John’s Evangelical Lutheran Church was disbanded officially in June 2001, just months before the Metropolitan Museum of Art acquired the sculpture that was so integral to the church’s original sanctuary. As the earliest documented American sculpture in the Museum’s holdings, the Eagle represents a highpoint of the Philadelphia woodcarving tradition and is a fitting complement to the Museum’s rich collection of Philadelphia furniture and an important precursor to the extensive holdings of American neoclassical marble sculpture.

NOTES

1. Kim-Eric Williams, “The Legacy of St. John’s,” Archives Advocate (newsletter of the Lutheran Archives Center of the Northeast Region), no. 5 (Adv 2001), p. 1. We are grateful to Dr. Williams and John E. Peterson, Curator, Lutheran Archives Center at Philadelphia, for sharing their expertise on the history of St. John’s.

2. The two reclining figures are the male Allegory of the Schuylkill River in Its Improved State and the female Allegory of the Waterworks (both 1825; Philadelphia Museum of Art). See Linda Bantel et al., William Rush: American Sculptor, exh. cat., Pennsylvania Academy of the Fine Arts, Philadelphia (Philadelphia, 1982), pp. 172–74, nos. 96–97. As a member of Philadelphia’s Common Council, Rush also served on the committee to expand the waterworks (pp. 18–19).


4. See Minutes, St. John’s Church, May 23, 1809, vol. 2, p. 100, which note “that the Church be opened on the third Sunday in June next.”

5. Minutes, St. John’s Church, February 26, 1808, vol. 2, p. 29.

6. This woodwork was installed in the renovated American galleries of the Philadelphia Museum of Art. Thanks to Kathleen Foster, Robert L. McNeil, Jr., Curator of American Art, and David deMuzio, Elaine S. Harrington Senior Conservator of Furniture and Woodwork, for providing information and facilitating access to this ensemble in storage.


8. Rush’s religion is not documented; he may have been Presbyterian. In 1816 he was reinterred in Woodlands Cemetery in West Philadelphia from one of two Presbyterian burial grounds in Philadelphia. See ibid., p. 194 n. 55.

9. Ibid., pp. 120–21, no. 41, and pp. 125–26, no. 47. St. Augustine’s Church and its contents were destroyed by fire in 1844 during anti-Catholic riots; the whereabouts of the St. Mary’s crucifix is unknown.

10. For an illustration of the ensemble, now located in St. Peter’s Church, Philadelphia, see Bantel et al., William Rush, p. 22, fig. 10. See also pp. 130–32, nos. 52–54.


13. Wolfram Koeppe, Curator, European Sculpture and Decorative Arts, Metropolitan Museum, kindly offered insight into the eagle-on-ornament motif.


15. Rush and Peale served in the same Philadelphia regiment during the American Revolution, and the two men were among a group of Philadelphia artists who in 1794 organized the city’s first art academy, the Columbianum; later in 1805 they were principal founders of the Pennsylvania Academy of the Fine Arts.

The portrait of Rush is attributed to Peale’s son Rembrandt (before 1813; Independence National Historical Park, Philadelphia).

17. Bantel et al., *William Rush*, p. 60. Rush’s sculptures on display included busts of Dr. Benjamin Rush, Dr. Philip Syng Physick, General Winfield Scott, and, possibly, Andrew Jackson.


23. Virginia Norton Naudé, “Toolmarks and Fingerprints: A Technical Discussion,” in Bantel et al., *William Rush*, p. 78. She posits that with slight adjustments to the mounting system the Academy eagle could have served as ship ornament.


27. Kim-Eric Williams to Thayer Tolles, e-mail, October 1, 2004.

28. Some of the items listed here are hard to identify and are possibly no longer with the sculpture. Still, it is tempting to speculate that the “plate for washer + ring” is the same as the paddle-shaped element described on page 225. Similarly, one cannot dismiss the possibility that the “clamp with eight screws for eagle” are in fact the large crossbar (twice stamped Goodman) and the eight oversize carriage bolts with which the two wings are attached to it (in addition, two, of what are likely large wood screws with square heads, are inserted downward through the crossbar in order to secure it to the eagle’s back).


30. The crossbar is, on average, 115 mm wide, 15 mm thick, and spans approximately 1.5 meters. It is connected to both wings with four carriage bolts apiece. The bolts have an average diameter of approximately 1.4 mm, with a thread of about 3 teeth per millimeter. The nuts measure between 30–34 mm, and individually most of them are close to square.

Table of EDS results in weight percent

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Table of EDS results in weight percent

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<td>Al</td>
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<td>13.6</td>
<td>86.3</td>
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Bronze paint |
31. The longitudinal arm measures 54 mm x 38 mm in cross section.

32. Electron dispersive spectrometry (EDS) analyses were carried out by Mark T. Wypyski, Research Scientist, Department of Scientific Research, Metropolitan Museum (see Table, preceding page). Pascale Patris, Associate Conservator, Objects Conservation, Metropolitan Museum, lent her expertise to help interpret the stratification of several of the cross sections.

33. Polarized microscopy for the purpose of pigment analysis was completed by Marco Leuna, Scientist in Charge, Department of Scientific Research, Metropolitan Museum.

34. Bantel et al., William Rush, p. 123.

35. Linda Bantel to Susan Menconi, Hirsch & Adler Galleries, New York, December 23, 1986. We are grateful to Stuart P. Feld, President, Hirsch & Adler, for sharing a copy of this letter as well as other useful insights about the Eagle’s history.


38. Minutes, St. John’s Church, July 1, 1847, vol. 3, pp. 34–41.

39. Minutes of Select Council, October 7, 1847, p. 147, and app. XXV, typescript copy, September 3, 1958. Archives, Independence National Historical Park, Philadelphia. We are grateful to Karie Diethorn, Chief Curator; Robert Giannini, Museum Curator; and Karen Stevens, Archivist, Independence National Historical Park, for providing us with extensive archival and photographic documentation relating to the Eagle’s tenure at Independence Hall.

40. Minutes, St. John’s Church, February 14, 1848, vol. 4, p. 27.


42. The print in the Library Company of Philadelphia is unannotated and is dated in ink “1853”; no further evidence exists to date the image conclusively.


45. George Pierce, Chief, Bureau of City Property, to Kensel Wills, September 27, 1899, recorded in St. John’s Church trustee minutes, October 5, 1899, in “Compilation of the Church Records by Kensel Wills,” p. 561, Lutheran Archives Center at Philadelphia. Wills transcribed, indexed, and annotated the church’s minutes into a single volume.


49. Ibid., p. 1.
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 collections and the areas of investigation they represent. Articles are contributed by members of the Museum staff and other art historians and specialists. Submissions should be addressed to:

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For the style of bibliographic references in endnotes, authors are referred to the Museum’s style guide, which in turn is based on the 15th edition (2003) of *The Chicago Manual of Style*. In bibliographic citations, please give the author’s full name; the title and subtitle of the book or article and periodical; place and date of publication; volume and page number. For subsequent references to cited works, use the author’s last name and a shortened form of the title rather than *op. cit.* The *Metropolitan Museum of Art Guide to Editorial Style and Procedures* is available from the Museum’s Editorial Department upon request.

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