MANET'S LOST INFANTA

ALBERT BOIME AND ALEXANDER KOSSOLAPOV

ABSTRACT—The scientific examination of the privately owned painting (fragment/copy after Velázquez's Infanta Maria Margarita from the Louvre collection) has been completed. Based on documented historical evidence, stylistic and chemical analysis of paints, and individual technical features revealed by x-ray radiography and infrared photography (IR), the painting has been attributed to the French painter Édouard Manet and dated from the beginning of the 1860s.

TITRE—L'Infante perdue de Manet. RÉSUMÉ—L'examen scientifique d'une peinture d'une collection particulière a été effectué. Il s'agit d'un fragment/copie de l'oeuvre de Velasquez intitulée l'Infante Maria Margarita dans la collection du Louvre. A l'aide de documents historiques, d'analyses stylistiques et chimiques de la peinture, et des caractéristiques techniques révélées par les rayons X et la photographie à l'infra-rouge, la peinture a été attribuée au peintre français Édouard Manet et datée du début des années 1860.

TITULO—La infanta perdida de Manet. RESUMEN—Se ha completado el examen científico del cuadro perteneciente a un coleccionista privado (fragmento/copia de Infanta Maria Margarita de Velázquez de la colección privada del Louvre). Sobre la base de evidencia histórica documentada, del análisis químico y estilístico de la pintura y los rasgos técnicos individuales revelados por radiografías (rayos X) y fotografías infrarrojas (IR), el cuadro ha sido atribuido al pintor francés Édouard Manet y fechado en el comienzo de los años 1860.

TÍTULO—A Infanta perdida de Manet. RESUMO—O exame científico da pintura de propriedade particular (fragmento/cópia da obra de Velázquez Infanta Maria Margarita, da coleção do Museu do Louvre) foi concluído. Com base nas evidências históricas documentadas, na análise estilística e química da pintura e nas características técnicas individuais reveladas através de radiografia com raio-X e fotografia infra-vermelha (IR), a tela foi atribuída ao pintor francês Édouard Manet e datada do início dos anos 1860.

1. INTRODUCTION

The subject of this study is an oil painting, 46.0 x 38.1 cm (fig. 1, see page 442), a fragmentary and unsigned copy of Velázquez's familiar Infanta Maria Margarita (fig. 2, see page 442), which has been widely admired since its arrival in the Louvre in 1816. The provenance of this painting is obscure prior to 1967, when an American lawyer briefly working in Amsterdam bought it and three other paintings from a small basement gallery on the Rozengracht. The owner of the gallery initially identified the Infanta painting as a Diego Velázquez (1599–1660) in the “certificate” given to its purchaser at the time. He claimed to have discovered it years ago in Paris with its background “fully painted over” (Branner 1988, 73). He subsequently removed the overpainting.

In 1968–70 various professionals to whom this Infanta was shown unanimously recognized it as a copy after Velázquez, dating to approximately 1850–70. The chief conservator of the Art Institute of Chicago, Alfred Jakstas, for example (Branner 1988), concluded from a lengthy examination, with no techniques other than x-rays, binocular microscope, and visual analysis, that it could be dated unequivocally to “third quarter, 19th century.” Another conservation report, dated May 1970, found it was “probably painted in 19th century” and otherwise described its condition as follows:

Unframed, unsigned oil painting on fabric depicting a copy of a Young Girl's Portrait by Velázquez, size 18½" x 15" stretched on a five-piece stretcher with a horizontal crosspiece. . . . There is a great deal of debris lodged between the rear of the canvas and the bottom stretcher piece (cobwebs, lint etc.). . . . The canvas is dry and brittle. There are holes in the canvas which had been crudely “repaired” and are located as
follows: 1/2"diameter hole at H5" W2" extensively overpainted in the front, paper-like material glued on the back. 1/2" diameter hole at H11" W4 1/8" just to the left of the girl's cheek in the hairline. This had been extensively overpainted and crudely patched on the rear with paper-like material and glue. 1/2" diameter hole at H14" W11"... There are about half a dozen paint marks (5 white 1 red) in the upper right quadrant and similar white and light blue point marks along the top edge of the picture. These seem to be original paint though. (Quoted in Brainard 1988, 94)

It may be concluded from the conservators' reports that the state of preservation of the painting was rather poor and, what is more significant, that the paint stains and unprofessional repairs were well in line with the earlier statement of the owner of the Amsterdam gallery. On the back of the horizontal stretcher's crosspiece the word "Bertram" (or "Bertran") is handwritten with a brushlike instrument. This inscription can scarcely be taken as an indication of authorship for two main reasons:

First, the emission spectrum analysis (by Bernard Hauser of Spectro-Chemical Research Laboratories, Chicago, laboratory no. 23548, of November 20, 1970) shows that the inscription material differs from any black on the painting itself. The latter contains lead, while the former does not. This finding might be taken as a good indication of its not being oil color, but rather a type of ink (Brainard 1988).

Second, there are just two artists bearing the name Bertran(n) who are known in the second half of the nineteenth century: Abel Bertram, a French landscape artist born in 1871 (1871–1954), and Pablo Maria Beltran y Tintore, a lesser-known late-19th-century Spanish artist known mostly for his religious scenes in the Cathedral of Salamanca, who studied under Henri Gervex in Paris and exhibited his works in Madrid in 1892 and whose name was sometimes spelled “Bertan” (Thieme-Becker 1909; Saur 1995). Neither of those artists can reasonably be associated with the present Infanta other than as a prior owner or handler.

Persistently rebuffed in his attempt to vindicate the relationship to Velázquez by a dating inconsis-

tency that was undeniable, the lawyer displayed the painting to a number of professional persons knowledgeable on French art of the period. Inevitably, such studies turned toward the Spanish Revival period (1845–1865) and to one of its main exponents, Édouard Manet (1832–1883). On June 18, 1970, one of the recognized Édouard Manet historians in the United States, John Richardson, then with Christie's in New York and having seen the photographs of the Infanta with another Manet expert, Professor George Heard Hamilton, wrote a letter to the owner stating that "after examining at length...the various photographs of your Manet...we both feel it would be rash to dismiss the possibility of its being an authentic early work" (quoted in Brainard 1988, 95). Other Manet experts, some of whom Richardson had identified, were then consulted, and in a short time it became apparent that about 1860 Manet had in fact executed a copy of the Infanta that had been lost or thought destroyed long ago. One possible claimant for the lost work advanced by Jacques Mathey had long been challenged for its flaccid qualities and consequently was placed outside contention (fig. 3). While the art historians were uniformly receptive to at least the possibility of the present painting's being attributed to Manet, years passed and interest in it subsided, until 1977, when Anne Coffin Hanson included the painting in her seminal work, *Manet and the Modern Tradition*, identifying it as the product of an unknown artist but nonetheless "probably the best contestant" for the lost Manet (Hanson 1977, 156 and fig. 99).

2. ART HISTORICAL VIEW

Perhaps no other modern French painter has been submitted to as much intensive scrutiny as Édouard Manet. Every conceivable aspect of his life and work seems to have been exhaustively explored, leaving little fresh ground for either the aspiring scholar or seasoned veteran to cultivate. Yet despite the ardent devotion of scholar and critic to Manet and his work as a pathway to modernity, there remain conspicuous gaps in the record, especially concerning his early efforts to modernize canonical models. It is incontestable that Manet deliberately set out to challenge
the Old Masters on their own turf and remained committed to measuring his efforts against the various traditions throughout his career. He systematically made copies of drawings, reproductions, and original paintings of the canonical masters, and recent research has uncovered numerous new sources for his work during his visit to Italy in 1857 (Meller 2002).

What is crucial in these findings is the disclosure of Manet’s process of appropriating a usable past for his personal projects; thus, tracing his sources is tantamount to uncovering fresh material about the content of his original productions (Fried 1996).

Perhaps one of the most vexing lacunae in Manet’s oeuvre has been the presumed physical absence of the copy that we know he made of Velázquez’s notorious Infanta Maria Margarita and for which he registered in the Louvre to copy in the period 1859–1860. We may immediately dismiss the spurious claim of the notorious forger, Eric Hebborn, that his teacher, W.A. Cuthbertson, painted this copy from Las Meninas in the Prado; in Las Meninas the Infanta faces in the opposite direction and wears a different costume! (Hebborn 1991, 45–47)). Although the painting under discussion was an excellent contender for the missing picture and had been proposed by Andrew Brainerd for several years, its lack of provenance and signature had cast a dubious pall over its origins. The oil study set forward by Brainerd as the lost Manet was first published by Anne Coffin Hanson in 1977 in her pathbreaking Manet and the Modern Tradition, where the copy was considered a likely “contestant” for work long known to have existed but never located and presumed lost or destroyed (Hanson 1977). Although she added that it was impossible in the present state of knowledge to firmly identify the picture and so consigned it to unknown authorship, she argued that of all the copies after the popular image that had surfaced over the years, this was the one example that came closest to approximating the methods and colors as well as the freshness and vivacity of Manet’s technique and style.

The hesitation of Hanson and others to assign an unequivocal attribution was understandable, given the absence of provenance and signature, two existential conditions the want of which naturally render any work problematic. Since Hanson published the painting, however, the work has been rigorously submitted to state-of-the-art scientific analysis. The results of this scrupulous examination ratify what the heart has known all along, and at long last we can state with a comfortable degree of certainty that the outcome of the application of the latest scientific methods to this picture has eradicated whatever reservations specialists may have felt over the years absent the two conditions noted above. Although art historians and art experts seem to be nervous about relying too heavily on the application of conservation science for authentication, in a case of this sort conservation science should be seen as the inevitable and necessary adjunct to sound connoisseurship. Regrettably, many art experts still mistrust the methods of the scientist, but it is our firm belief that not only is this gulf not unbridgeable, in future this collaboration will be the norm. It has always been a
given that in a situation where provenance and signature are absent, the convergence of agreement on the part of both art expert as to style and physical appearance (what has been called the work’s internal evidence) and conservation scientist as to technical and physical properties (the external evidence) establishes authenticity. We believe that now we have reached this level of assurance in the case of the Infanta María Margarita—thanks to the combined talents and impeccable technical analyses of Walter McCrone and one of the authors of this article.

Previously, a number of Manet specialists entertained the possibility of this sketch/copy being a Manet simply on the basis of surface appearances and the historical record. Indeed, on the basis of internal evidence—style, paint layer, and physical structure—there has never been any solid argument mustered by the critics and historians against a Manet identification in the case of the Infanta, and now that all the scientific data have been assembled and analyzed, the attribution seems to us indisputable. There is no need to rehash the abundant historical data of Manet’s profound debt to the Spanish master so amply documented in all the monographs. During his trip to Spain in September 1865, he wrote of his admiration for Velázquez in rapturous terms, the mere sight of whose work seemed a fulfillment of his most cherished ideals of painting. We know that he registered to copy at the Louvre on July 1, 1859, and two copies after paintings attributed to Velázquez belong to that period: Reunión de los Trece Caballeros, usually dated 1859–1860, and the Infanta María Margarita, reportedly executed concurrently with Edgar Degas’s (1834–1917) reproduction of the same work in 1859 (Reff 1964; Boggs 1958). Velázquez’s portrait of the Infanta María Margarita has been located in the Salon Carré of the Louvre Museum in Paris since 1816, and it became an object of great interest during the Second Empire at the height of the Spanish Revival. Manet did not fail to acknowledge this connection with Velázquez’s portrait in his most provocative Salon display of the period, the Olympia of 1863; he slyly transferred the pink flower from the head of the innocent Infanta to the head of his brazen courtesan to complicate his visual associations with the past and parodic challenge to tradition.

Manet’s emulation of Velázquez has recently been made the centerpiece of a major exhibition, Manet/Velázquez: The French Taste for Spanish Painting, organized in 2002 at the Musée d’Orsay in Paris and shown at the Metropolitan Museum of Art, March through June 2003. The show featured Velázquez and Manet side by side, demonstrating the full measure of the impact of the Spanish master on Manet’s developing sensibility. Here the viewer had the opportunity to witness directly that Manet’s taste for quizzical visual surprise fully exploited Velázquez’s paradoxical imagery (Schjeldahl 2002).

Manet’s paraphrase of the Infanta uses a smaller portion of the actual work in the Louvre, turning what is essentially a three-quarters length of the figure into a portrait bust that iconically centers the object. What is remarkable in both the drawn and painted copies of his early phase is his tendency to reduce the actual torsos of the originals to primarily head and shoulders—typical of his master Thomas Couture’s drawing style—and to centralize them (Meller 2002). Manet’s Portrait of Rouvier (Cabinet des dessins, Musée du Louvre, Paris) of 1860, for example, showing head and shoulders only of the sitter, could easily pass for the master’s work (Boime 1980). The residual influence of Couture on his disciple is perfectly understandable given Manet’s relatively recent departure from the studio where he spent almost six years (1850–56). Couture’s recipes, however, left an indelible impression on Manet, who continued this practice throughout most of his career, as seen in a series of quick studies of females in the early 1880s (Rouart and Wildenstein 1975). Some of the most startling examples of this approach are the drawn portraits of Gustave Courbet, Claude Monet, and Edgar Allan Poe, and the etched portrait in profile of Charles Baudelaire (ca. 1862–65), all of which dramatically attest to this tendency (Rouart and Wildenstein 1975, vol. 1, nos. 20, 55).

In the case of the Infanta, Manet’s skillful cropping adapted an off-center figure to his favorite centering mode. Andrew Berman has analyzed this tendency to compositional centrality and symmetry in Manet’s early portraiture and copying practice in what he describes as the “Manet Matrix” (Berman 1988, 41). Although in both his watercolor (fig. 4)
and etching (fig. 5) of the Infanta, presumably done after the painted copy, Manet has more or less included the entire figure (with some slight variations in the positioning of the Infanta), in these cases he is striving for reproductive accuracy rather than paraphrasing for study purposes. The sketch/copy of a type typical of studio practice in the period aimed at a shorthand penetration of a master's conceptual grasp of a subject and often assumed a fragmentary appearance (Boime 1971). In the case of the watercolor and etching, Manet was striving for completion probably for purposes of reproductive illustration or some type of documentation.

Michael Wilson first called attention to the singular process of scraping in Manet's methods, and since the publication of his study, other scholars have noted this propensity of the artist for scraping and rescraping down to the ground (Wilson 1983; Bareau 1986). The oil copy of the Infanta is no exception, and transmitted light photography reveals this salient characteristic of Manet's method in several places. These material traits substantiate the chemical evidence as analyzed by McCrone (Brainerd 1988), whose findings on the pigments in two established early Manet paintings—The Spanish Ballet of 1862 (Phillips Collection, Washington, D.C.) and Woman Pouring Water (Ordrupgaard Collection, Copenhagen) of ca. 1858–60—demonstrated unique optical and chemical properties common to all three and verified that the lead white of the two control samples and that of the Infanta probably originated from the same production lot. This finding means that Manet and the painter of the Infanta used the same pigments from the same supplier or suppliers in approximately the same time period. McCrone estimated the probability of coincidence in trace element concentration at one chance per billion. According to McCrone, the lead white in the The Spanish Ballet and the Infanta could not "be more similar if they had been squeezed from the same tube of paint" (Brainerd 1988, 174). McCrone further found that the agreement of pigment composition in all three examples provides strong support in favor of dating the Infanta near the middle of the 19th century. Finally, the scrupulous x-ray radiography and special photographic analysis, detailed below, further confirm the validity of McCrone's findings (Brainerd 1988) in revealing aspects of methods—preparatory painted contours,
the scraping down to the darker underpainting (the ébouche), the modeling brush strokes, heavily impastoed light areas, abrupt passages from light to dark—typical of other Manet paintings, all of which, we may venture to add, again point to the hallmarks of his master, Thomas Couture.

3. NONDESTRUCTIVE TECHNICAL EXAMINATION

It is worth emphasizing from the very beginning that as soon as the painting was dated and located in Paris by McCrone’s report, the field of contenders for authorship of the work was drastically reduced. Although sketch/copies were standard studio practice at the time, the example under consideration still displays singular traits of execution. There were only a handful of artists who, by 1860–62, had developed that “advanced” manner in which the Infanta was executed, and even mere surface observation reveals the color scheme of the Infanta to be an exact match with Manet’s contemporaneous palette. We will not proceed, however, along this line of reasoning, but confine ourselves to a purely technical comparison of Manet’s production techniques and style (as established both by our own scientific examination of his paintings created around 1860 and by the existing literature, including in particular Michael Wilson’s landmark study of the technical methods and procedures of the artist who painted this Infanta [Wilson 1983]).

1. The artist’s original outline sketch was done on the white ground of the canvas, painted in some darker color with scarcely any lead white, and appearing as dark fragments (e.g., the hair, eyes, mouth, etc. also look pitchy on the x-ray radiographs). The unfinished portrait of George Moore au Café (ca. 1878, Metropolitan Museum of Art, New York) presents such sketched outlines made in this kind of paint: “the lines of the head are brown, the coat and hat are blue-black” (Wilson 1983, 8). Manet’s sketching process, however, is revealed neither on his finished paintings by x-rays, as the sketch outlines do not contain enough lead white, nor by infrared photography, as the material used for sketching is deficient in carbon black.

On the Infanta, however, the presence of preparatory sketching may be traced on an enlarged photograph of the face (fig. 6, see page 442) in those areas not built up with pigment during the subsequent modeling. Such areas may be seen, for example, in her upper lip below the left nostril and in the corners of her mouth. These minuscule areas, of course, do not provide us enough information on the sketching method itself but are indicative of its practice.

2. On the finished sketch an underpainting (i.e., the lay-in of three-dimensional objects) begins in darker colors containing less lead white and ends with an almost pure white on the brightest parts. The modeling brushstrokes can be straight or curvy, short or elongated, as they follow the anatomically convex and concave parts of the face. This same manner of underpainting is clearly seen in the Infanta (see fig. 6, page 442), where the darker underpainting shows up in several areas. A comparison of the brushstrokes of the Infanta with those of two other Manet paintings (the boy’s face in The Old Musician [ca. 1862, National Gallery of Art] and the forehead of The Dead Toreador [ca. 1862, National Gallery of Art]), discloses brushstrokes of the same type definitely present in all (fig. 7) that verify Manet’s “handwriting” on the Infanta.

3. Manet typically applied his paint in a viscous, semidry impasto. The traces of the brush in the hair are usually seen in longer lead-white strokes, while the short ones generously used on smaller light spots/areas are less clearly resolved. These shorter strokes, densely set down, explain why many light regions on radiographs have jagged, torn edges. The light, elevated regions are modeled extremely roughly, almost sculpted rather than painted. Visually such areas, typical for Manet, may be easily traced on figure 6 in the Infanta’s left cheek, under her lower lip, on the left part of her chin, under her right eye, and so on.

4. The very idea of following the natural light distribution was alien to the artist. Manet, in principle, did not care about the smooth transition of light to shadow; the thick, bright-white brushstrokes are abruptly juxtaposed with the darker parts as if he ignores the very existence of intermediate halftones, which do not figure in his palette at all (Boime 1971; Wilson 1983). As a result of this technique, the boundary between dark (hair, background) and light
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1. Infanta

2. Dead Toreador

3. Old Musician

Fig. 7. Modeling brush strokes on three Manet paintings: L'Infante, The Dead Toreador, ca. 1862, National Gallery, 1942.9.40, and The Old Musician, ca. 1862, National Gallery, 1963.10.162.

(face, other lighter parts) is very sharp, and any smooth transition is absent both on regular photographs and radiographs. Probably those sharp boundaries (here referring to light contrast, not to the form or width of the boundary line itself) were extremely important to Manet, who quite intentionally pushed his brightest light precisely to the black borders. And it is worth observing that the light follows the dark, not to the contrary, as the principle of the painting technique on the white ground progresses in thickness from darker layers to the lighter ones (see above), i.e., the lights are painted last. In this way, the light areas normally are everywhere physically elevated above the dark except in the inevitable penitenti (see below). And, finally, the high contrasting border between the light and dark areas, with the absence of natural-looking tones, produces a very specific effect on the radiographs: all the faces appear like masks.

In our investigation we carefully studied the majority of existing x-ray radiographs of the early Manet paintings. In this article, however, we chose for technical comparison several representative examples taken from the paintings dating ca. 1862 (fig. 8): The Old Musician (National Gallery, Washington), The Dead Toreador (National Gallery), La Femme à la Crèche (Ordrupgaard Collection, Copenhagen), The Spanish Ballet (Phillips Collection), Le Bon Boeuf, (Philadelphia Museum of Art), Portrait of a Man (Rijksmuseum, Kröller-Müller, Otterlo, Holland). The radiograph of a single Manet copy was available to us, the Self-Portrait of Tintoretto (1854, Musée des Beaux Arts, Dijon), a painting crucial for our purpose, but unfortunately we have not received permission to reproduce it.

We have included the radiograph of the Infanta's face in the series to show a comparison that to us is self-evident: the Infanta is wearing the same sort of "mask" that everybody else wears in the Manet paintings illustrated. What is especially interesting in this example is that the Infanta's mask is formed by the borderline between her forehead and her hair, despite her hair's not being black but of a lighter color. This feature indicates that the forehead was joined to the black/darker hair during the underpainting stage, while in the finishing stage the hairdo was impastooed in light. In other words, it indicates that the artist followed a manner quite identical to that shown in the other Manet paintings pictured. Significantly, we may also look at the much later (1879) painting of Mlle. Isabelle Lemonnier to demonstrate that Manet did not abandon his "masking" habit for many years following the period under discussion.

5. Probably the most important, patently observable characteristic of Manet's alla prima painting in thick impasto (this technique implies that the volume and coloring were sought simultaneously by the artist) was his strange need to scrape away what he saw as unnecessary paint in order to reveal the more appropriate darker color beneath it. Michael Wilson, who follows, in his turn, the critics Théodore Duret and George Moore, has ably noted this peculiar feature: "As he applied washes of color to his painted drawing, Manet would continuously revise the contours of his image. Where the paint was thickly laid on he would often scrape it away to allow the ground to show through.... When he was dissatisfied he would scrape away and repaint over and over
again" (Wilson 1983, 9). And well beyond what one might even imagine from these recitals, the envious observation of Manet’s sister-in-law, Berthe Morisot (1841–1895), tells us the magnitude of his attachment to this unusual process: “At the moment all his admiration is concentrated on Mlle Gonzales, but the portrait makes no progress. He tells me that he is at the fortieith sitting and the head has again been scraped off” (Wilson 1983, 10).

In line with this process, we would be inclined to add one related observation, that the overwhelming majority of Manet’s works, excepting his copies, reveal on x-ray radiographs total or local compositional changes. Even on his copies, however, as we have seen, Manet at least revised the contours. To proceed along this important line of inquiry, we must briefly comment on certain technical aspects of this scraping process.

The result of the scraping of white lead-rich paint on the contours may not be seen well on x-ray radiographs if the scraping did not produce noticeable defects in the lead-rich ground of the painting. What we may be able to see on the radiographs are just a few more jagged edges on the borders between dark and light regions, the effect of which can be well disguised by the technical feature described above (3). The transmitted light photographs (TLPH) and/or reflected infrared photographs, however, can indeed reveal the scraping rather well in cases where the underpainting done with a darker paint on a white background has been scraped away. As few specialists are familiar in practice with these techniques, it may be helpful to explain very briefly the difference between x-ray radiographs and TLPH.

For x-ray, the main absorbing pigment in paintings is lead white. As a result, what we see on a radiograph is the lead-white presence, or its distribution, in the painting. For TLPH, the main absorbing paints are those that contain carbon black (burnt bone, charcoal, or soot). When TLPH is made in the infrared region (at wavelength greater than 1.6–1.8 μm), it reveals predominantly the presence of carbon black; when it is made in visual light, it reveals the distribution of all darker, light-absorbing pigments. Lead white, for example, does not absorb light well; its “hiding power” is based on the effective scattering.
of light (due to the big difference in refractive index value for lead carbonate and binding medium), but not on its absorption. Thus this pigment (if it is pure and if its layer is not too thick) looks white in transmitted light. The same is true for any artist's white pigment and for white ground layers also.

Reflected infrared photographs work, in principle, similarly to common reflected light photography, except that in the infrared spectrum the coefficients of reflection/absorption for artistic pigments differ very much from the corresponding coefficients in the visual range. In particular, in the near infrared, absorption of a majority of pigments is negligible, unlike the visual region (to which main absorption bands of such pigments belong, providing their corresponding colors), and the reflected infrared photography practically does not disclose absorption at all for all pigments with just one exception—carbon black—the pigment for which absorption stays high, almost the same as it is in the visual range. As for the artists' pigments' reflection/scattering, it falls approximately linearly with the increase of the wavelength, and as their absorption stays low, paint layers become more transparent (less reflective) the longer the infrared wavelength chosen for photography. The carbon black–based pigments, though, practically do not change their very high light absorption in the near infrared, and consequently their level of reflectivity remains low. Due to such effects, reflected infrared photographs can help to trace the distribution of carbon black (or pigments containing carbon black) on a painting, revealing, by the way, even the carbon black underpainting or underdrawing hidden under the upper paint layers. Thus, on the reflected infrared photographs, free carbon–containing pigments (visually looking dark/black) are rendered black as they would be in the common visual range photographs, but with much higher contrast due to very small absorption of all other types of pigments looking white (nonabsorbing).

If we bear in mind that Manet consistently used white/light grounds on his paintings and that his individual manner included the scraping of his own paint even down into the ground (i.e., at times he scraped away the darker, carbon black underpainting as well), there are excellent opportunities to view the scraping both in TLPH and in reflected infrared. In TLPH the scrapings may look like white lines with jagged contours on the darker background, as the light passing through such scraping is less absorbed compared with the neighboring, nonscraped background. In the infrared the scrapings also look white because the well-reflecting ground is “seen” through the scrapings. In both cases, scraped lines may be situated along the borders of light and shadow zones, where the contours allegedly have been “revised.”

As we have thus established certain specific technological criteria for the revealing of scraping, we may now apply them to the Infanta. In figure 9, taken in reflected infrared, the scraping (the broad, lighter-looking scratch with jagged edges) can be definitely traced. The paint was scraped down to the ground of

Fig. 9. Édouard Manet, L'Infante Marie-Marguerite, detail of photograph taken in infrared.
the painting just above the head, on the border of the hairdo and the dark surrounding background, where the contours of the head were revised. The scraping is also revealed in figure 10, taken in transmitted light. That photograph reveals scraping not only on the border (e.g., see the white line between the forehead and the hair), but also on the left part of the cheek, where the white was scraped to be replaced with the now existing pink color seen on the same place in figure 6 (see page 442).

At the same time, it is necessary to discuss certain differences that the Infanta presents on the radiographs in the comparative series shown in figure 8. The difference is that the painting on the Infanta's face is somehow less full-bodied, the lead-white layer thinner and less "sculptured" than in the other examples. For this reason one cannot clearly see the modeling brushstrokes here, and, as a result, the face looks less spotty, painted less "aggressively" than the other faces on the x-ray radiographs.

Significant compositional changes are absent as well. To be scrupulous, we must note that the modeling is performed with a thinner brush than was used, for example, on The Old Musician. We believe that such differences may be explained when we recollect that the painting under examination is indeed a copy, and that the copying process may, by definition,
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partially suppress any painter’s creative approach to the task. At the same time, every copyist normally pays less attention to secondary details, such as dress and accessories. Indeed, a close look at figure 11, the radiograph of the Infanta’s dress, reveals a much freer approach, more recognizably Manet, than seen in the radiograph of the face in figure 8.

4. CONCLUSIONS

We introduced the reader to a painting whose artist used both the same colors and combinations of colors, even paints taken from the same factory stock, as those consistently used by Manet ca. 1860. It is a painting that visibly conforms to the large variety of criteria broadly known to characterize the working techniques and cultural affinities of this artist, down to the strange peculiarities of his individual manner. The historical record documents Manet’s execution of an oil copy of the Velázquez Infanta during this period. Have we then succeeded in establishing the authenticity of the painting?

It seems impossible to us to ascribe to coincidence this variety of astonishing congruities. The scientific examination described in this study reports findings objectively arrived at with great caution. We believe it adds confirmation to the convincing factual aggregate of textual material already known about this painting. Our answer to that question of authenticity is consequently, yes, this is the work of Édouard Manet, well beyond any reasonable doubt.

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REFERENCES


FURTHER READING


ALBERT BOIME earned his Ph.D. in art history from Columbia University in 1968. He specializes in the study of modern art and has made notable contributions to the understanding of art instruction in the 19th century. He is currently working on a multivolume Social History of Modern Art, the first two volumes of which have been published by University of Chicago Press.

ALEXANDER J. KOSSOLAPOV earned his M.S. in physics at Leningrad University, Russia, in 1970, and his Ph.D. in physics/engineering in 1980. In 1972–90 he was the head of the Laboratory for Scientific Examination of Works of Art in the Hermitage Museum, Leningrad. In 1990 he was senior research fellow in the Getty Conservation Institute, and in 1991–95 special Mellon fellow/senior research fellow/scientist at the Los Angeles County Museum of Art Conservation Center. In 1998–99, he held a position as senior fellow at the Center for Advanced Study in the Visual Arts (CASVA), National Gallery of Art, Washington, D.C. Since 1996 he has held the principal scientific museum position in Russia, as head of the scientific department of the State Hermitage Museum.

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MANET’S LOST INFANTA

ALBERT BOIME AND ALEXANDER KOSSOLAPOV

(color plates, p. 442; see article pp. 407–418)

Fig. 1. Édouard Manet, L’Infante Marie-Marguerite, ca. 1859–1862, oil on canvas, 46 x 38.1 cm, private collection, United States

Fig. 2. Diego Velázquez, Infanta Maria Margarita, ca. 1653, oil on canvas, 70 x 59 cm, Musée du Louvre, 941

Fig. 6. Édouard Manet, L’Infante Marie-Marguerite, detail (face)