

***‘PORTRAIT OF A LADY’  
or ‘Portrait of Dona  
Joaquina Candado’***

*By a Follower of Francisco de Goya*

The Courtauld Institute of Art:  
Conservation and Art Historical  
Analysis

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## **INTRODUCTION**

The annual project *Conservation and Art Historical Analysis*, presented by the Courtauld Institute of Art Research Forum, seeks to bridge the divide between art historical and technical inquiry. The project involves the collaboration between students of the department of easel paintings conservation and students of art history at the Courtauld Institute of Art. By drawing upon these distinct, but related disciplines the project aims to utilise the knowledge and individual skill sets of each collaborator. In doing so, the project seeks to provide a multifaceted approach to art historical research, with the aim of enriching our understanding of paintings as tangible, physical objects.

The following report will present the findings of a research collaboration focusing on the material and art historical aspects of *Portrait of a Lady* (fig. 1), attributed to a follower of the Spanish Master, Francisco de Goya (1746-1828). The painting, which features the bust-length figure of a woman wearing a black veil, bears notable similarities to a number of works by Goya, in terms of both composition and painterly style. In the following sections of the report, we will explore the impact of Goya's art upon artists of the nineteenth century. Focus will be placed copyists and followers of Goya's style, as well as the function of their paintings within the context of nineteenth century artistic output. We will aim to explore the compositional and aesthetic qualities adopted by these artists in their quest to convey the spirit of Goya's art through the process of replication.

Throughout our research the painting as a physical object has served as a primary source of information. It therefore seems fitting to commence our report with a thorough account of the painting's material history, outlining its various campaigns of restoration and evidence of past damage. In addition, the report will offer a detailed look at the painting's material composition through the means of technical analysis. Through techniques such as x-radiography, infrared-reflectography, cross-sectional analysis and microscopic examination of the painted surface, we hope to bring to light the various stages of the painting's execution and how these correlate to the works of Goya.

## **PORTRAIT OF A LADY: THE OBJECT AND ITS PHYSICAL HISTORY**

Given the central role of the painting as a physical object within the context of our research it is important to have a thorough understanding of its material history in order to form an appreciation of how it has changed over time and how this limits our interpretation of its aesthetic qualities. As with many Old Master paintings, *Portrait of a Lady* has not survived its long physical history completely unscathed, but rather has undergone a series of changes, which relate to past damage, previous restoration and ageing processes inherent to the artist's choice of materials.

The initial examination of the painting revealed a thick coating of an unevenly applied, glossy varnish. The unevenness of the application, as well as the excessive use of varnish- evidenced by 'drip-marks' in the lower half of the painting- creates an unbalanced surface, which hinders our appreciation of the painting's aesthetic subtleties. The painting further exhibits an extensive campaign of retouching, which covers vast areas of the green background, as well as selected areas on the figure. A photograph taken of the painting in ultraviolet light (fig. 3) gives an appreciation of the extent of the restoration present on the painting.<sup>1</sup> This extensive campaign of retouching is also visible by means of microscopic examination of the painting's surface, revealing a broad application of scattered 'splatter-marks', which cover the entirety of the green background (fig. 12). In most cases the retouching serves to cover the extensive abrasion present on the painting, although much of the abrasion was left exposed in the sitter's face and torso (fig. 16). The retouching is isolated from the original paint layers by an underlying layer of varnish, which is more thinly and evenly applied than the upper, thick layer of varnish.

In addition to the extensive retouching present throughout the centre of the painting, there is also retouching along all four outer edges. The retouching along the edges of the painting extends approximately 1.5 cm into the picture plane and consists of multiple applications (fig. 15). The uppermost layer of retouching consists of a dark red paint, which was preceded by a light-red layer that is sensitive to water. These two layers of retouching were executed on top of a white, chalk-containing fill, which is non-original. Directly underneath this fill there is an additional layer of dark-red retouching, also executed on top of a chalk-based fill. In order to further understand the layer structure of the painting, a small section of the fills and retouching was removed from the top, left-hand corner (fig. 17a-17h). The removal of the fills and retouching in this area revealed a thicker, red layer with an undulating surface, which is thought to correspond to the original ground and priming layer. The identification of the undulating layer as the original ground layer is further inferred from an x-radiograph of the painting (fig. 5), which shows that the ground stops at the same distance from the edge of the painting (fig. 6). The removal of the fills also revealed a fibrous, paper-like material (fig. 14), which extends inwards under the lower fill, but stops short of the original ground layer. It is possible that this 'paper' interlayer derives from a past lining treatment, where it may have been used to tension the painting prior to lining.

Aside from the multiple layers of varnish and retouching present on the painting, *Portrait of a Lady* also has a complex physical structure, which stems from a series of lining treatments. The uppermost canvas layer (presumed to be original), which is placed directly underneath the original ground, consists of a very fine, open weave canvas with a thread count of 13 threads per centimeter in the vertical direction and

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<sup>1</sup> The retouching is present in the areas that appear darker in the image.

17 in the horizontal. At some point during the painting's history this uppermost canvas layer appears to have been lined using a thicker piece of canvas (fig. 13). Both pieces of canvas were subsequently cut down, presumably to fit the dimensions of the present stretcher, and lined using the current lining canvas, which also has a thread count of 13 x 17 threads.<sup>2</sup>

Whilst it is likely that the multiple layers of canvas witnessed in *Portrait of a Lady* derives from consecutive lining treatments, a second hypothesis posits a different reason for the painting's current physical structure. More specifically, it is possible that the painting's multiple canvas layers are the result of a transfer, where the painting would have been removed from its original support and mounted onto a new piece of canvas. An additional observation, which gives credit to this hypothesis, is that the thread count of the weave imprint visible in the x-radiograph of the painting does not appear to correspond to the thread count of the uppermost canvas layer.<sup>3</sup> Whilst it is possible that the differing weave count is due to the presence of a radio-opaque material between the uppermost canvas layer and one of the subsequent lining canvases, it is also possible that the imprint visible in the x-ray derives from an earlier, original canvas, which has now been removed.<sup>4</sup>

At the current stage of analysis it is difficult to decisively confirm the treatment process that resulted in the painting as we see it today, although both aforementioned hypotheses would involve significant changes to the painting's original, conceived appearance. These changes include not only a departure from the painting's original dimensions, but also visual changes that may have occurred as a result of the lining/transfer process, such as the flattening of *impasto* or a change in the surface texture of the paint. The evidence gained through this thorough examination of the painting gives an indication of the extensive damage and subsequent restoration treatment that it has undergone since its inception. The extensive abrasion in the sitter's face and torso, coupled with the wide-scale retouching present in the green background gives an unbalanced aesthetic appreciation of the painting, which is presented simultaneously as considerably damaged artwork and as a heavily restored object.

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<sup>2</sup> Measured within 1 cm<sup>2</sup>.

<sup>3</sup> The thread count of the imprint visible in the x-radiograph measures 13 x 13 threads per cm<sup>2</sup>.

<sup>4</sup> It is also possible that the weave imprint visible in the x-ray is the result of a past lining treatment.

## ART HISTORICAL CONTEXT: GOYA AND HIS FOLLOWERS

### Provenance

The earliest mention of *Portrait of a Lady* was in 1912, when the Stadtische Kunsthalle in Dusseldorf had an exhibition of the collection of Marzell von Nemes, a Jewish Hungarian merchant and collector credited with bringing the taste for Goya and El Greco to Hungary.<sup>5</sup> In the catalogue of the exhibit, there are six Goyas listed including a portrait entitled *Dona Joaquina Candado* (fig. 7).<sup>6</sup> Though the green background around the sitter appears larger in the catalogue, the undeniable similarities in size and composition make it probable that this is *Portrait of a Lady* before it was damaged (fig. 9-10).

In the same catalogue, there is a strikingly similar *Portrait of Rafael Esteve the Engraver*, also listed as a Goya (fig. 8).<sup>7</sup> This work seems to be compositionally based on Goya's *Portrait of Rafael Esteve* (fig. 21), which can now be seen along with his original *Portrait of Dona Joaquina Candado* (fig. 20) in the Museo de Belles Arts in Valencia. The two copies listed in the catalogue of the exhibition in the Stadtische Kunsthalle were also both previously owned by the same Spanish collector, Mariano Hernando.<sup>8</sup> Other than his sale of these two portraits to Marzell von Nemes, Hernando is also recorded in the sale of El Greco paintings to the Museo Municipal in Madrid in 1908 – demonstrating his activity in the trade of Spanish Master paintings.<sup>9</sup>

In 1913, Marzell von Nemes' collection was exhibited and sold at Galerie Manzi in Paris. The auction catalogue reveals that *Portrait of a Lady* and the *Portrait of Rafael Esteve* were not included in the sale, while the other four paintings attributed to Goya from the Dusseldorf catalogue were still present.<sup>10</sup> This suggests that the two paintings were sold or under restoration. They also may have been determined not to be by Goya, but as there is no record to determine with certainty why these two paintings were not

During the twentieth century, World War I and World War II displaced much of the art in Europe. Because of this devastation, it is hard to trace many works of art that were in European collections in the early twentieth century. After 1912, there is no further record of *Portrait of a Lady* until an auction sale at Gorrings Auction House in July 2008, when it was sold to the current owner. In the auction catalogue, the attribution of the painting was changed and is listed as the 'Circle of Francisco de Goya'.<sup>11</sup> Similarly, there is no record of the *Portrait of Rafael Esteve* until 1999 when

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<sup>5</sup> J. Wilde, *Katalog der aus der Sammlung des Kgl. rates Marzell von Nemes – Budapest*, Stadtische Kunsthalle Dusseldorf, Dusseldorf, 1912.

<sup>6</sup> Ibid.; see number 74 for the *Porträt der Doña Joaquina Candado*.

<sup>7</sup> Ibid.; see number 76 for the *Porträt des Kupferstechers D. Rafael Esteve*.

<sup>8</sup> Provenance information taken from the description of each portrait in J. Wilde, numbers 74 & 76.

<sup>9</sup> Don Mariano Hernando from Madrid is mentioned in reference to the sale of two El Greco paintings in a document detailing the acquisitions of the museum in 1908: *36ª Sesión de la Junta de Gobierno Del Museo Municipal*, 9 October, 1908: 96 v.

<sup>10</sup> L. Roger-Milès, *Catalogue des tableaux anciens des écoles des XIVe, XVe, XVIe, XVIIe, XVIIIe et XIXe siècles... composant la collection de M. Marzell de Nemes de Budapest*, Galerie Manzi, Paris, 1913. For paintings attributed to Goya, see numbers 40-43.

<sup>11</sup> Auction information on the *Portrait of a Lady* can be found at: <http://www.gorrings.co.uk>

it may have been sold at Kunsthaus Lempertz in Cologne.<sup>12</sup> However, since there is no picture that accompanies the sale, it is impossible to be sure if it is the same version, since like the *Portrait of Dona Joaquina Candado*, this was a commonly copied portrait in the nineteenth century.

### **Goya's Style & Subject Matter**

*Portrait of a Lady* bears a striking likeness to Goya's *Portrait of Dona Joaquina Candado*, which was painted during the artist's stay in Valencia around 1790. Although the sitter in Goya's portrait is shown seated in an outdoor setting, compositional similarities can still be seen between this painting and *Portrait of a Lady*. Examples include the two ladies' hairstyles, poses, and facial expressions, as well as the placement of their black *mantillas* over their shoulders. In addition, there are also certain technical aspects observed in *Portrait of a Lady* that are reminiscent of Goya's painterly style. For example, a similarity can be seen in the *chiaroscuro* modelling of the sitter's face, as well as the impressionistic rendition of her black *mantilla*.

In terms of composition, *Portrait of a Lady* is also similar to a series of portrait studies that Goya painted in preparation for the large-scale commission featuring *Carlos IV and his Family* (fig. 19). These preparatory sketches make use of a red-coloured preparatory layer, which also features in *Portrait of a Lady*, as does the green background (fig. 18a-18d). In addition, the sketches reveal Goya's desire to capture a naturalistic likeness in the faces of the sitters. Much focus has been placed on the subtle modelling of the sitters' flesh tones and facial expressions, whereas contrastingly little attention was paid to their clothing. This is understandable, as the function of these studies would have been to capture an initial likeness of the sitter, whilst leaving other features, such as dress and the background setting, to be painted in the final composition. A similar hierarchy of forms can be seen in *Portrait of a Lady*, where emphasis has been placed on the modelling of the sitter's face. Contrastingly, little attention was paid to the sitter's torso and clothing – both of which were painted using broad, often singly applied strokes. In depicting the sitter's black *mantilla* the artist also diverged from the naturalism of the flesh tones in favour of a more impressionistic approach, whereby form is merely eluded to using contour-like lines.

Yet, whilst there are stylistic qualities in *Portrait of a Lady* that certainly allude to the works of Goya, there are also differences. For example, there is a clear distinction between the two artists' handling of paint. Compared to the naturalistic verisimilitude of Goya's portraits, the artist's rendition of the sitter in *Portrait of a Lady* appears more deliberate and stylised. This differentiation furthers the argument that *Portrait of a Lady* is a copy after the *Portrait of Dona Joaquina Candado*, as when copying from another painting an artist has an exact still model and therefore the draughtsmanship often appears less naturalistic. In *Portrait of a Lady*, details like the swiftly painted strokes on the lace of the sitter's *mantilla* seem to be taken directly from the *Portrait of Dona Joaquina Candado* but lack the spontaneity of Goya's original composition. It is likely that these distinctions in style and handling were the reason for the re-attribution of *Portrait of a Lady* to a follower of Goya, as opposed to the artist himself.

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<sup>12</sup> Auction information on the Portrait of Rafael Esteve can be found at: <http://artsalesindex.artinfo.com/asi/lots/2723701>



## Function: A Copy after Goya

The hurried and sketchy rendition of the sitter in *Portrait of a Lady* suggests that it is an unfinished work, or was perhaps intended as a portrait study. The fact that the painting appears to draw its inspiration from Goya's *Portrait of Dona Joaquina Candado* has led to the suggestion that it may have functioned as a copy for the purpose of study.<sup>13</sup>

As previously mentioned, the *Portrait of Dona Joaquina Candado* can now be found in the Museo de Belles Artes in Valencia along with Goya's original *Portrait of Rafael Esteve*. Both of these paintings are part of the collection of the Academia de San Carlos, an academy founded in 1768 with many prominent alumni. The *Portrait of Dona Joaquina Candado* entered the collection in 1819 through her will, while the *Portrait of Rafael Esteve* was given to the academy in 1847 by Antonio Esteve, the sitter's nephew.<sup>14</sup> Without close examination of the *Portrait of Rafael Esteve*, it is impossible to be sure whether these two paintings are by the same artist. However, given the two paintings' stylistic similarities, as well as the fact that the canvases are of a similar size, it is possible that the same artist painted both works. This theory is furthered by the similarity in provenance records and the fact that both works were copied from paintings in the collection of the Academia de San Carlos. It seems that even by the twentieth century, these works were related since Marczell von Nemes removed both of them from his collection between 1912 and 1913.

The fact that both paintings were part of an art academy's collection lends credence to the claim that *Portrait of a Lady*, as well as the copy of Goya's *Portrait of Rafael Esteve*, may have been copied by students of the art academy as studies. In a collection of royal ordinances communicated to the Academia de San Carlos between 1770 and 1808 there is a description of the curriculum of the academy, which emphasises the importance of copying Master paintings to the education of young Spanish painters.<sup>15</sup> This exercise sheds light on the culture of art education in the nineteenth century – showing the inspiration behind the next generation of artists who learned techniques from emulating Goya, as well as other master artists, in order to create their own distinct styles.

The practice of copying portraits from the academy's collection is also demonstrated through the large number of copies after the *Portrait of Dona Joaquina Candado*, which were found in the Witt Library and categorised either as works by Goya or the circle of Goya. (fig. 11a-11d). These copies show that this particular work by Goya was often copied and the varying degrees of skill show that artists of different levels or stages of their artistic training copied the portrait. At the Academia de San Carlos, students were often admitted at a young age and developed their skills over a long period of study. It is also interesting to note that many of these copies do not incorporate the background, showing that the main focus was on the face, rather

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<sup>13</sup> For more information on the *Portrait of Dona Joaquina Candado*, see Gudiol, Gudiol. J ed. *Goya: Biography, Analytical Study and Catalogue of his Paintings*, Ediciones Poligrafa S. A., Barcelona, 1971: 133-134.

<sup>14</sup> This information is presented on the museum labels at the Museo de Belles Artes in Valencia and on the museum's website at: [http://museobellasartesvalencia.gva.es/index.php?option=com\\_content&view=article&id=593%3Aretrato-de-dona-joaquina-candado&catid=89%3Agoya-maella-y-lopez&Itemid=123&lang=es](http://museobellasartesvalencia.gva.es/index.php?option=com_content&view=article&id=593%3Aretrato-de-dona-joaquina-candado&catid=89%3Agoya-maella-y-lopez&Itemid=123&lang=es)

<sup>15</sup> Monfort, B, ed., *Coleccion de reales ordenes comunicadas a la Real Academia de San Carlos, desde el año de 1770 hasta el de 1808*, Valencia, 1909: 47

than the portrait setting. In this sense, the pupils at the academy used these exercises in the same way that Goya used his portrait sketches – as a means of studying a likeness or a way of modelling the human face without spending time on the background details.

However, despite the concentration on the face, the similarities in composition between *Portrait of a Lady* and the aforementioned portrait sketches by Goya suggest that the artist was aware of these paintings or copies of them. Taking this into account, it is possible that *Portrait of a Lady* was intended as a broader study of various aspects of Goya's technique, drawing upon the *Portrait of Dona Joaquina Candado* as its primary influence, but also utilising compositional aspects used by Goya in his portrait sketches, such as the orange-red ground and the green background.

Copying Master works was an important part of the formation of the generation of Spanish artists after Goya. These artists were marked by eclecticism – combining the styles of Master painters into a new manner characteristic of Spanish Impressionism. For example, some of the early portraits by Joaquin Sorolla, who is perhaps the most prominent example of an artist trained at Academia de San Carlos in the late nineteenth century, show a similar sketchily painted style and use of a dark background emulating the style of Goya as seen in his portrait sketches and in completed portraits like the *Portrait of Dona Joaquina Candado*. Similarly, the portrait style of Francisco Domingo Marques, another prominent alumnus of the Academia de San Carlos, demonstrates a sketchily painted style of working up the face of the sitter while the background is made with muted browns and greens that are very similar to those seen in the copy of the *Portrait of Dona Joaquina Candado*. These are examples of famous Spanish artists who were profoundly affected by Goya's style. Their use of his manner is a characteristic of the generation of artists after Goya who adopted his style in their works. This generation is known for their eclectic style that drew inspiration from various artistic traditions – from Spanish artists like Murillo and Goya to French impressionists like Renoir. The product is a unique style that is seen in the work of prominent members of this generation such as Sorolla and Marques. The emphasis on working quickly and completing works within a set time is further embodied by a quote by Sorolla. In relation to his working practice he stated:

*'I could not paint at all if I had to paint slowly. Every effect is so transient, it must be rapidly painted.'*<sup>16</sup>

The desire for expedience is moreover reflected in the materials and techniques used by the painter of *Portrait of a Lady*, which in turn correlates well to the idea that the painting may have been intended as a copy for the purpose of study. As previously mentioned, there appear to be many copies after Goya's *Portrait of Dona Joaquina Candado*, most of which also are half-length in size.

### **Collecting Goya**

In her article 'Spain, Painting and Authentic Goya's in Nineteenth Century France' Janis Tomlinson discusses the widespread appeal of Goya's art during the latter half

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<sup>16</sup> [http://www.sorollapaintings.com/sorolla\\_quotes.htm](http://www.sorollapaintings.com/sorolla_quotes.htm)

of the nineteenth century.<sup>17</sup> Tomlinson lists a number of factors pertaining to Goya's paintings, which are relevant when it comes to considering their impact on later artists. One such factor is Goya's use of Spanish subject matter, which added an element of exoticism to the artist's works, as viewed by nineteenth century audiences outside of Spain. Notable examples include the dress of the Spanish *maja*, characterised by the black *mantilla* worn by the sitter in Goya's *Portrait of the Duchess of Alba*, as well as the *Portrait of Dona Joaquina Candado*. The dress of the *maja* was originally a somewhat scandalous costume associated with the lower classes. However, in the eighteenth century, this dress became popular for upper class ladies who rebelled against the characteristically Anglo-French style of dress in favour of the more feminine *maja* dress.<sup>18</sup> However, these aristocratic ladies modified the style with lavish fabrics that distinguished them from the populace. Janis Tomlinson points out that Goya seems to have preferred the dress of the *maja*, probably because it was seductive and created confusion about the identity of the sitter since often aristocratic ladies appeared dressed in a style characteristic of common people.<sup>19</sup> Regardless of his motives, the depiction of the *maja* dress has become a characteristically Spanish element of Goya's paintings that was prized both by artists of the subsequent generation, as well as collectors.

Another factor in Goya's popularity was his use of expressionistic brushwork and economic handling of paint. Tomlinson argues that Goya's innovative style acted as an antithesis to the formality that had become the standard of the French Academy – which alongside the exoticism of Spanish national life appealed to subsequent generations of artists who sought to break free from the rigid control of the academic system. Interestingly, Tomlinson also discusses the prominence of the sketch amongst subsequent copies of Goya's paintings. She notes that an 'obvious way to fake authenticity is to create a work that appears as a first thought'.<sup>20</sup>

In the case of *Portrait of a Lady*, the attribution to Goya may have occurred at a later date, as opposed to when it was created, perhaps at the beginning of the twentieth century when Marzell von Nemes acquired the painting. However, although there is no evidence for *Portrait of a Lady* ever having been intended as a forgery, the notion of the sketch is still interesting in that it contributes to what Tomlinson refers to as the 'cumulative invention' of Goya as an artist.<sup>21</sup> Critics and writers of the late nineteenth century regarded Goya as a 'Romantic genius' with little patience for bringing his works to completion.<sup>22</sup> In this sense, the sketch, rather than the finished portrait, becomes a truer and more immediate reflection of Goya's artistic temperament and working practice.

All of these factors seem to ring true when it comes to discerning the stylistic and compositional elements in Goya's paintings that inspired the artist behind *Portrait of a Lady*, and indeed the other followers of Goya found in Witt Library. In *Portrait of a Lady* one can clearly see the artist's desire to convey the expressionistic brushwork that was so admired in Goya's paintings by artists of the late nineteenth century.

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<sup>17</sup> Tomlinson, J, 'Evolving Concepts: Spain, Painting and Authentic Goyas in Nineteenth-Century France', *Metropolitan Museum Journal*, Vol. 31, 1996, available at: [www.jstor.org](http://www.jstor.org), accessed on: 01/12/2014

<sup>18</sup> Tomlinson, J and Serraller, F, *Goya: Images of Women*, National Gallery of Art, Washington D.C., 2002: 82-82.

<sup>19</sup> *ibid.*

<sup>20</sup> Tomlinson, J and Serraller, F., *Goya: Images of Women*: 82-82.

<sup>21</sup> Tomlinson, J, 'Evolving Concepts'

<sup>22</sup> *ibid.*

Moreover, the clear reference to the dress of the *maja* not only establishes a compositional similarity between *Portrait of a Lady* and Goya's original *Portrait of Dona Joaquina Candado*, but also introduces the element of Spanish subject matter, which was heavily eroticised by artists working outside of Spain during this period. Finally, the importance of the sketch in the construction of Goya's artistic personality can be seen in *Portrait of a Lady*, whereby the artist provides a seemingly deliberate compositional reference to the sketches that Goya painted for the *Portrait of Carlos IV and his Family*, characterised by their red ground and green backgrounds, which were used to frame the sitter's heads.

The combination of a subject based on one of Goya's portraits and the use of various compositional elements utilised by the artist for his portrait sketches may be the reason for the initial attribution of *Portrait of a Lady* to Goya himself. As there is no known portrait sketch for Goya's *Portrait of Dona Joaquina Candado*, the attribution was most likely based on the notion that Goya made a preliminary sketch of the sitter's face, just as he did for the sitters in *Carlos IV and his Family*. This theory would have been easily discounted had the artist painted a full-length copy of the *Portrait of Dona Joaquina Candado* with the background setting included, as a comparison to the original would have exposed the imitation. However, based on the aforementioned stylistic similarities with Goya's portrait sketches, the claim could be made that Goya himself may have painted *Portrait of a Lady*.

## **MATERIALS & TECHNIQUE: A COPY AFTER GOYA**

In order to gain a broader understanding of how *Portrait of a Lady* correlates to the works of Goya on a material level it was important to explore the physical nature of the painting itself. Since the work was clearly inspired by Goya's art in terms of both painterly style and composition, it was hoped that a thorough technical examination of the painting would reveal to what degree this inspiration influenced the artist's choice of materials.

### **Preparatory Layers**

After establishing the extent the restoration present on the painting, efforts were made to understand what remained of the artist's original technique. Aside from the x-radiograph made of the painting, additional examination was undertaken using infrared-reflectography and infrared digital photography (fig 4.). This initial examination showed that *Portrait of a Lady* was painted without the use of any discernible underdrawing, suggesting that the artist may already have been familiar with the composition in some way, perhaps through the Academia de San Carlos mentioned in the previous section.<sup>23</sup> Examination using infrared also confirmed that a reserve was left for the sitter prior to the addition of the locally painted green background, as otherwise one would expect to see the dark background paint behind the sitter in the photograph. This being said, certain compositional elements such as the black *mantilla* were added after the green background was painted, most likely as finishing touches after the completion of the central features of the figure.

Additional information pertaining to the layer structure of the painting was also gained through cross-sectional analysis. A paint sample taken from the excavated, top-left corner of the painting (fig. 21a) showed a white, semi-translucent layer, which was applied to the uppermost canvas after the application of a size layer.<sup>24</sup> This white layer was further applied in several stages. The first application appears more transparent in the cross-section, whilst the second application appears more white and opaque. SEM-EDX<sup>25</sup> analysis of the sample revealed an elemental composition consisting primarily of chalk in both the upper and lower layer. The white layer was succeeded by a translucent layer, which fluoresces green when viewed in ultraviolet light (fig. 21b), indicating the presence of an organic medium. A staining test of the sample using Acid Fuschin, followed by a counter-stain using Rhodamine B revealed that this organic layer might consist of an oil-based medium.<sup>26</sup> The organic layer was added directly on top of the chalk-based layer, perhaps in preparation for the application of the subsequent orange-red priming, although its exact function is currently unknown.

It is difficult to decisively confirm the function of the various organic and chalk-based layers that are present underneath the orange-red priming. It is possible that

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<sup>23</sup> It is possible that the artist made use of an underdrawing medium that does not absorb in the infrared region of the electromagnetic spectrum. However, since no further evidence of underdrawing was detected by means of microscopic examination of the painted surface, it seems likely that the artist omitted the use of a preparatory drawing and instead conceived the composition during the painting phase.

<sup>24</sup> The presence of a size layer between the ground and canvas was confirmed through a staining tests using Acid Fuschin.

<sup>25</sup> Scanning electron microscopy-energy dispersive x-ray spectroscopy.

<sup>26</sup> Alternatively, it may represent a varnish layer, as Rhodamine B is known to solubilise natural resin varnishes.

they simply constitute a chalk-containing ground layer, which was placed directly on top of the uppermost canvas layer. Although this canvas has a very fine, open weave, such canvases were certainly available to artists during the nineteenth century. Notable examples include the French *etude* canvases, which were a cheaper, student-grade support with a finer, more open weave.<sup>27</sup>

Alternatively, the finely woven canvas, as well as the chalk-based layers may be the result of past restoration treatment, such as a transfer, which was mentioned in the previous section.<sup>28</sup> Accounts of historical transfers indicate that it was common practice to build up the back of the exposed ground through multiple applications of chalk or gesso.<sup>29</sup> In some cases a thin piece of gauze-like fabric would also be added as an interlayer between the applications or towards the end of the build up, as a means of providing additional support to the back of the painting.<sup>30</sup> Finally an adhesive, such as wax-resin or animal glue, would be added to the back of the built-up ground and the painting would be attached to a new support (a new canvas or a more rigid structure).<sup>31</sup> The technical examination of *Portrait of a Lady* was not able to confirm whether or not the painting has undergone a transfer treatment as part of its restoration history. However, the consistencies between the various layers of the painting and descriptions of historical transfers make it plausible to suggest that more than one possible explanation exists for its current physical structure.

Following the organic and chalk-based layers, the artist added a thick, orange-red priming consisting of red and white pigment particles.<sup>32</sup> SEM-EDX of a sample (fig. 22a) containing this priming layer revealed an elemental composition consisting of iron, aluminium, silicon, lead, potassium, chlorine and calcium. The presence of iron and red-coloured pigment particles in the sample indicates the use of an iron oxide red pigment, as opposed to vermilion (HgS), for the priming. The aluminium and silicon suggest the presence of aluminosilicates, which most likely correlate to various clay minerals that are often found in association with earth pigments.<sup>33</sup> Similarly, the potassium, chlorine and calcium may be present in the form of trace elements that are often found in these accessory minerals, whilst the calcium may also be indicative of chalk (CaCO<sub>3</sub>). The lead present in the sample indicates the use of the common pigment lead white (PbCO<sub>3</sub>Pb(OH)<sub>2</sub>), visible in the form of white, rounded pigment particles.

Directly on top of the orange-red priming the artist added a translucent layer, which fluoresces green when viewed in ultraviolet light (fig. 22b), indicating the presence

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<sup>27</sup> Callen, A, *The Art of Impressionism: Painting Technique and the Making of Modernity*, Yale University Press, New Haven & London, 2000: 30

<sup>28</sup> Massing, A, *Painting Restoration Before La Restauration: The Origins of the Profession in France*, Harvey Miller Publishers, London, 2012: 31-61

<sup>29</sup> This would have been done after the removal of the painting from its original support.

<sup>30</sup> Lucas, A, 'The Transfer of Easel Paintings', in; *Contributions to the IIC Rome Conference, Preprints*, 1961: 296-302

<sup>31</sup> *ibid.*

<sup>32</sup> It is thought that the artist applied the orange-red priming, given its unusual pigmentation within the context of nineteenth century painting practice. Moreover, the binding-medium used for this layer, consisting of aqueous, protein-containing substance, is also less common for commercially prepared grounds of this period.

<sup>33</sup> Hradil, D, Hradilová, J & Bezduška, P, 'New Criteria for Classification and Differentiation between Clay and Iron Oxide Pigments of Various Origins', in; *ACTA ARTIS ACADEMICA, The Story of Art-Artwork Changes in Time*, Hradil, D & Hradilová, J eds., Tiskárna Polygraf S.V.O, Turnov, 2010: 126

of an organic medium. A staining test of a sample taken from the green background revealed the presence of protein in both the orange-red priming and the translucent organic layer (fig. 23).<sup>34</sup> Through further empirical testing it was also revealed that both the organic layer and the orange-red priming are sensitive to aqueous solutions. Based on these results, it seems likely the priming was bound using an aqueous, protein-containing medium such as animal glue. It also appears as if the artist applied a single layer of animal glue directly on top of the priming prior to the application of the paint.

The function of this glue interlayer is unclear. Rica Jones, writing in relation to proteinaceous interlayers identified in eighteenth century double-grounds, speculates that the purpose of a glue interlayer may have been to enable the application of a second ground layer before the underlying layer was completely dry.<sup>35</sup> Such an explanation seems unlikely in the case of *Portrait of a Lady*, as the glue layer was added after the application of the orange-red priming, as opposed to an interlayer between ground layers. A more plausible function for this glue layer would therefore be to lower the absorbency of the aqueous priming. Historical accounts indicate that artists used similar isolation layers in the nineteenth century, as a means of lowering the absorbency of so-called 'absorbent' and 'semi-absorbent' commercial grounds, which consisted primarily of aqueous binding media.<sup>36</sup> The reason for lowering the absorbency of these grounds would have been to limit the de-saturation of the subsequent paint layers, thereby preventing the painting from having a matt appearance.

The choice of an aqueous-based priming for *Portrait of a Lady* may be due to the simple matter of expediency. Aqueous, glue-bound grounds dry at a significantly faster rate than oil-based artists' grounds. For this reason, absorbent and semi-absorbent grounds were quicker to prepare and were relatively cheap compared to colourmen's oil grounds, which would take several months to dry completely. It therefore seems plausible to suggest that the artist opted for an aqueous priming due to its quick drying rate, and later aimed to lower its absorbency through the addition of a glue 'isolation' layer. The addition of an isolation layer would make sense, as this would have allowed the artist to create a surface aesthetic more akin to that of Goya's oil paintings, without necessitating the need for an oil-based priming layer. This desire for expediency also relates well to the fast working practice of students working at the Academia de San Carlos, who as previously mentioned, showed a similar desire for rapid execution.

### Coloured Grounds

The combination of iron oxide red and alumino-silicates identified in the orange-red priming has also been found in grounds used by Goya, such as the portrait of *Don Francisco de Saavedra* belonging to the Courtauld Gallery (figs. 24-25) and *The Forcibly Bewitched* (fig. 26) in the National Gallery, London. Coloured grounds, such as these, were more common in Europe during the sixteenth and seventeenth centuries. Examples include the works of Caravaggio, as well as artists belonging to

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<sup>34</sup> The protein was identified through staining using Acid Fuschin. A counter-stain was also carried out using Rhodamine B, which showed no conclusive results for the presence of oil.

<sup>35</sup> Hackney, S, Jones, R & Townsend, J, *Paint and Purpose: A Study of Technique in British Art*, Tate Gallery Publishing Ltd., London, 1999:48

<sup>36</sup> Stols-Witlox, M, 'Grounds, 1400-1900', in; *The Conservation of Easel Paintings*, Hill-Stoner, J & Rushfield, R eds., Routledge, London, 2012: 180-181

the Spanish tradition, most notably El Greco and Diego Velazquez.<sup>37</sup> Coloured grounds allowed for a more economical painting technique, as the ground colour could easily be used to convey the effect of *chiaroscuro*, which was in vogue during this period.<sup>38</sup>

In the case of Velazquez, the artist is known to have used a variety of coloured grounds throughout his career, exemplified by works such as *Los Borrachos* and *Christ after the Flagellation*. Moreover, it appears as if Velazquez's choice of ground colour was directly influenced by the availability of local materials. For example, during his first active years in Seville (c. 1618-1622) all of his works make use of the local Seville clay, known as *barro* or *terra de sevilla*, as proscribed by his master and father-in-law, Francisco Pacheco.<sup>39</sup> Similarly, every thoroughly examined picture attributed to Velazquez and his workshop during the artist's Madrid period (c. 1624-1628) features a red ground, which invariably consists of the local red earth (*tierra de Esquivias*).<sup>40</sup>

Reddish coloured grounds have also been identified in a number of paintings by Goya, such as *Fernando VII riding a horse*, where the ground was shown to contain a mixture of red earth, lead white and red lead.<sup>41</sup> A similar ground preparation was also identified on the initial ground layer of the *Portrait of the Countess Chinchón* (fig. 27), consisting of red earth, an organic black pigment and a little lead white.<sup>42</sup> Although some artists are known to have prepared their own grounds, Goya, like so many Master painters of the period, delegated the preparation of grounds to his colourmen.<sup>43</sup>

Whilst coloured grounds remained popular during the seventeenth and early eighteenth centuries, by the late eighteenth century artists were becoming increasingly concerned over the effect of strongly coloured grounds on the tonality of paintings as they aged over time. As a result of this, there was a movement towards lightly coloured grounds including white, light yellow, light pink and light grey.<sup>44</sup> The trend towards brightness is particularly reflected in the aesthetic of the nineteenth century Impressionists, who rejected the use of dark pigments outright in favour of a lighter palette.<sup>45</sup> This being said, strongly coloured grounds remained in use for specific purposes until quite late in the nineteenth century, as exemplified by the works of Goya and his followers.

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<sup>37</sup> Newman. R, 'Velazquez's Painting Materials', in; *Examining Velazquez*, McKim-Smith. G, Andersen-Bergdoll. G & Newman. R eds., Yale University Press, New Haven & London, 1988: 81-96

<sup>38</sup> Stols-Witlox. M, 'Grounds, 1400-1900', in; *Conservation of Easel Paintings*, Hill-Stoner. J & Rushfield. R eds., Routledge, London & New York, 2012: 166

<sup>39</sup> Keith. L & Carr. D. W, 'Velazquez Christ after the Flagellation: Technique in Context', in; *National Gallery Technical Bulletin, Vol. 30*, Yale University Press, National Gallery Company, London, 2009: 52-55

<sup>40</sup> *ibid.*

<sup>41</sup> 'Estudio técnico de *Fernando VII a caballo* de Francisco de Goya', in; *Bienes Culturales*, No.8, 2008: 117-132

<sup>42</sup> 'El retrato de *La condesa de Chinchón*: estudio técnico', C.Garrido, *Boletín del Museo del Prado*, Vol. 21, No. 39, 2003: 44-55

<sup>43</sup> *Bienes Culturales*, No.8, 2008: 117-132

<sup>44</sup> Stols-Witlox. M, 2012: 177

<sup>45</sup> *ibid.*



The use of an orange-red priming for *Portrait of a Lady*, which would have been uncommon within the context of nineteenth century painting practice, therefore seems to be a deliberate reference to the works of Goya. Yet, whilst the combination of pigments used for the orange-red priming in *Portrait of a Lady* is certainly similar to the grounds used by Goya, it cannot be interpreted as evidence for the artist having direct knowledge of Goya's painting practice or being associated with Goya's workshop. Rather, it is possible that the pigmentation of the priming simply derives from the artist's desire to emulate the reddish ground used by Goya in his portrait sketches for *Carlos IV and his Family*. The use of red earth and lead white are by no means anomalous within the context of nineteenth century painting practice and, as such, the combination may be the result of a mere coincidence. This being said, the use of an orange-red priming for *Portrait of a Lady* seems to be a deliberate reference to Goya's painting practice. For, although the choice of pigments may not be significant in and of itself, the choice of colour certainly is, demonstrating that the artist wanted to convey the red ground colour of Goya's portrait sketches, in the same way that they chose to frame the figure using a green background.

### **Paint Application & Palette**

Following the application of the orange-red priming and glue layer, the artist commenced with the painting of the composition. Examination of several cross-sections taken from different areas of the painting showed that the paint layers were applied thinly, often using single applications. Given the thinness of the paint layers, it appears as if the artist built up the shaded modeling of the sitter's flesh tones using an *alla prima* technique. This technique requires a fast way of working, because the work has to be finished before the first layers have dried and allows for graduated modeling without the subsequent application of glazes. The painting was moreover executed in a sketchy manner, with broad, impressionistic brushstrokes, and it is possible that it was completed in a single sitting.

Cross-sectional analysis coupled with handheld x-ray fluorescence further showed that the artist made use of a modest palette, consisting mainly of earth pigments, as well as lead white, vermilion and a carbon-based black pigment. The green paint used for the background was shown to consist of a mixture containing lead white, iron oxide red and Prussian blue, which was confirmed through a microchemical test.<sup>46</sup> In using a limited palette for the composition the artist relied heavily on the orange-red priming to create the warm tonality of the sitter's flesh tones, thereby utilising an economical painting technique that is not completely dissimilar to Goya's own style. A good example of Goya's economy of paint can be seen in his *Portrait of Don Francisco de Saavedra*, where the artist made extensive use of the pinkish ground layer in order to create the shimmering effect of the sitter's satin coat.

In terms of the composition, greater attention was paid to the sitter's face, which was built up in a more detailed manner using soft, feathered strokes. The emphasis on naturalism is clearly seen in the subtle *chiaroscuro* modeling of the sitter's hair and face, in particular the grey-toned shading around the woman's eyes and jaw-line. Contrastingly, little attention was paid to the sitter's torso and clothing, both of which were painted using broad, often singly applied strokes. In depicting the sitter's

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<sup>46</sup> The presence of Prussian blue was confirmed through a microchemical tests using a dilute solution of sodium hydroxide (NaOH), followed by a reverse-reaction using dilute hydrochloric acid (HCl). The pigment discoloured to brown upon exposure to the base and regained its colour when exposed to the acid.

black *mantilla* the artist also diverged from the naturalism of the flesh tones in favor of a more impressionistic approach, whereby form is merely eluded to using contour-like brushstrokes.

The staining test used to confirm the binding medium of the priming layer was not successful in identifying the binding medium used for the paint. Solubility tests have shown that the paint layers are considerably sensitive to the polar solvents commonly used for the removal of degraded natural resin varnishes. Based on this observation, it is possible that the paint may contain a resinous component, or similar additive, which would render the paint film sensitive to polar organic solvents. Alternatively, the paint may consist of a relatively young oil-based binding medium, which would also be sensitive to polar solvents. Additional medium analysis using a spatially resolved method such as FTIR<sup>47</sup> may yield further results regarding the composition of the binding medium. At the present stage of analysis however, the binding medium used for the paint remains unknown.

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<sup>47</sup> Fourier Transform Infrared Spectroscopy.

## **CONCLUDING REMARKS**

At the outset of this collaboration much of the preliminary research regarding *Portrait of a Lady* was based on the painting's tentative attribution to Goya, or the circle of Goya. However, through the collaborative process, combining both technical and art historical investigation, the research was re-directed to consider the broader sphere of nineteenth century copying practices and the fashion for Goya during the latter half of the century. It is now believed that the function of the painting relates to the study of Goya's style by artists of subsequent generations, such as the students of the Academia de San Carlos and other admirers of the artist's work. The emphasis on rapid brushwork and Spanish subject matter, as well compositional elements such as the red-coloured priming and green background, all reflect the impact of Goya's art upon the artist behind *Portrait of a Lady*. Moreover, the desire for expediency, suggested by the artist's adoption of an aqueous priming and use of an *alla prima* painting technique, again fits well with the conclusion that the painting was produced as a quick sketch with the intention of studying Goya's style, as opposed to a finished piece.

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- 36<sup>a</sup> Sesión de la Junta de Gobierno Del Museo Municipal, 9 October, 1908, p. 96 v.

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**ILLUSTRATIONS**



Figure 1: Before treatment digital photograph of *Portrait of a Lady*, recto, ordinary light (Photograph: Emma Jansson)

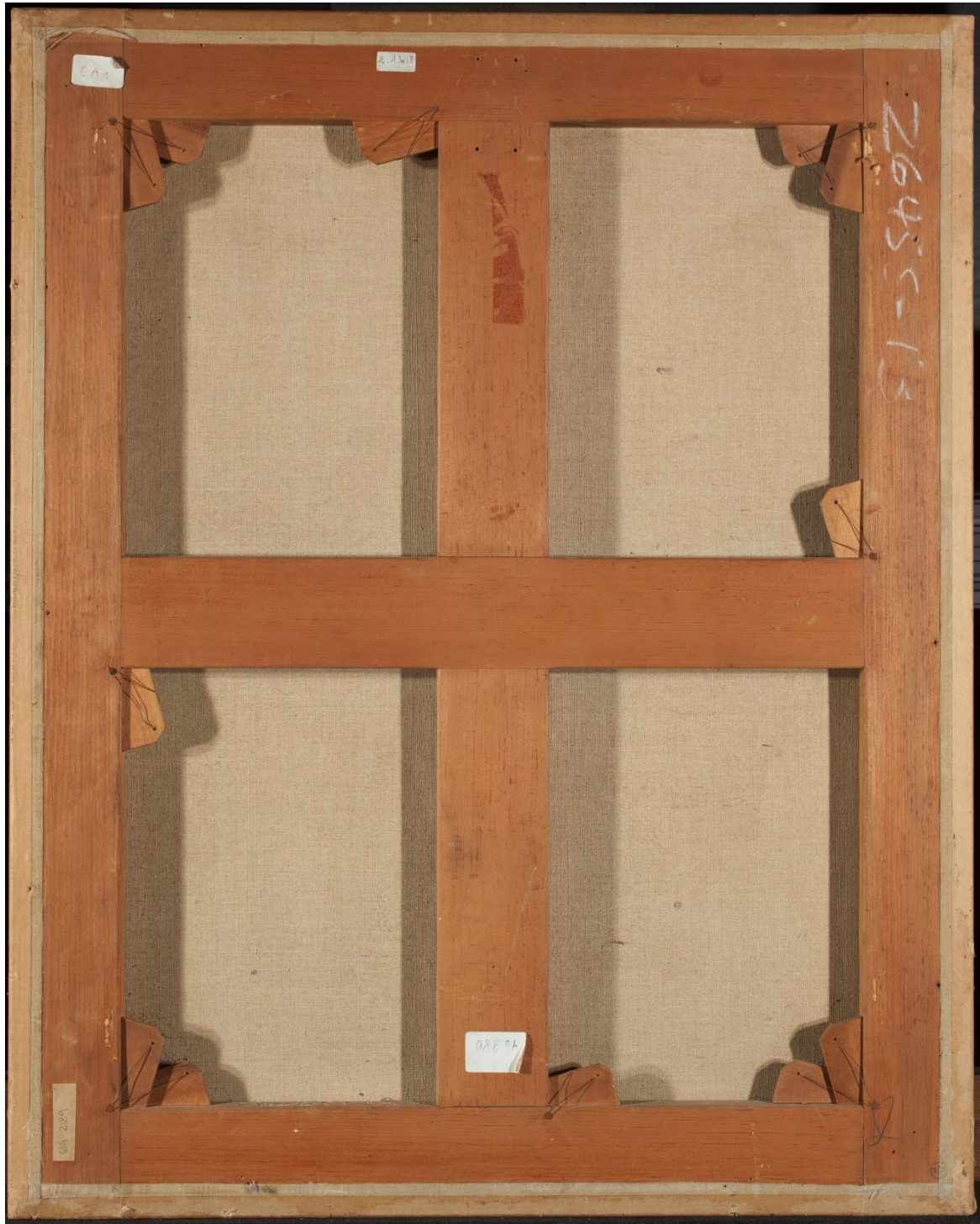


Figure 2: Before treatment digital photograph of *Portrait of a Lady*, verso, ordinary light (Photograph: Emma Jansson)



Figure 3: Before treatment digital photograph of *Portrait of a Lady*, recto, ultraviolet light (Photograph: Emma Jansson)



Figure 4: Before treatment digital photograph of *Portrait of a Lady*, recto, infrared digital photograph (Photograph: Emma Jansson)

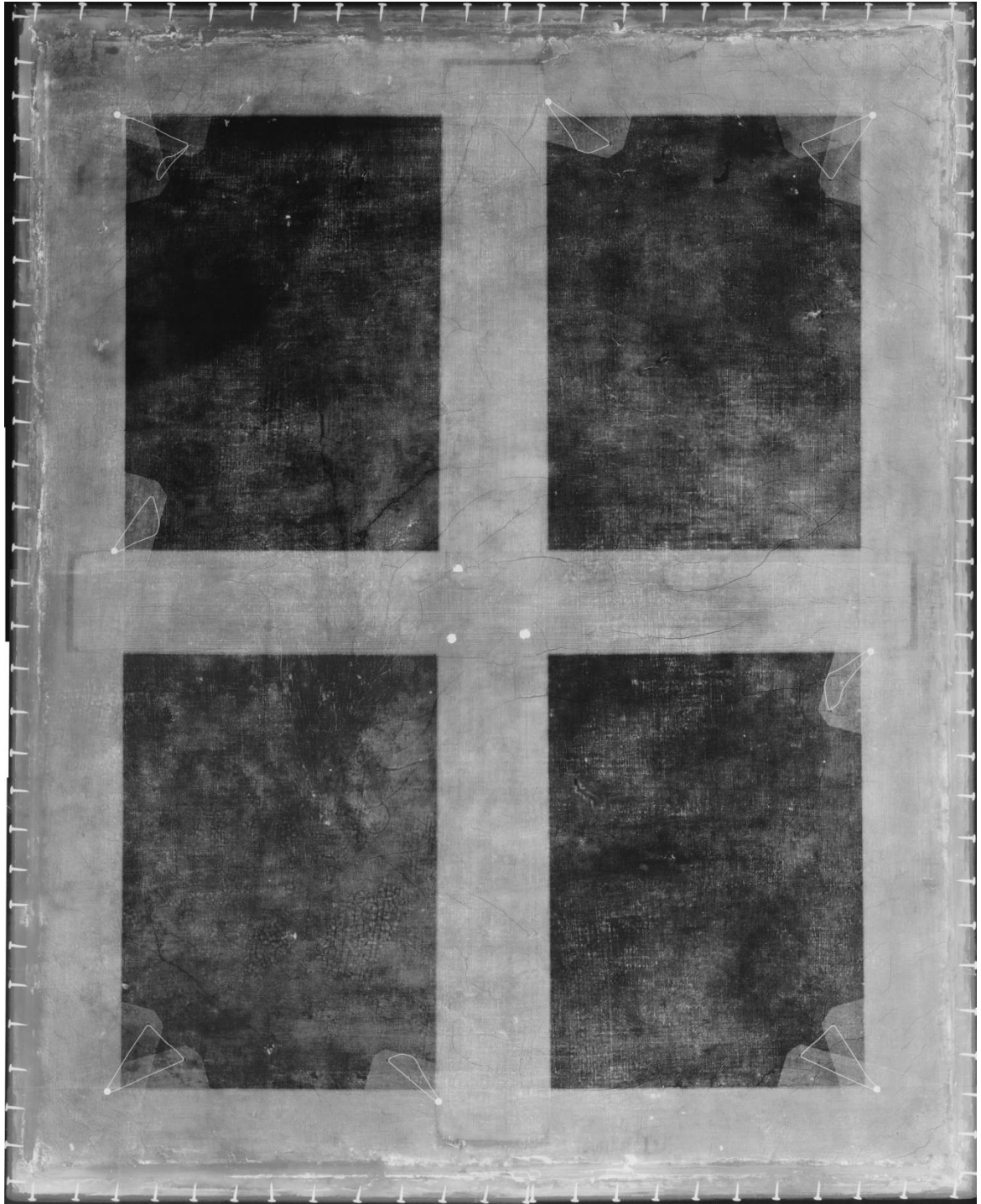


Figure 5: X-radiograph of *Portrait of a Lady* (X-radiograph: Emma Jansson and Sylvia Amato, Courtauld Institute of Art)

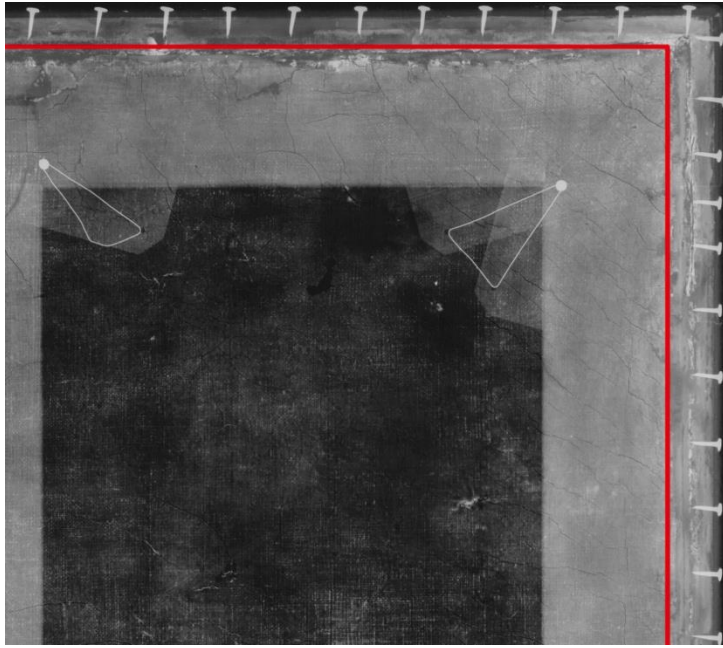


Figure 6: Detail of the x-radiograph in fig. 4, top, right corner. The red lines indicate where the original ground stops before it reaches the edge of the painting in its current format.



Figure 7: Photograph of *Portrait of a Lady*, Witt Library (Photograph taken c. 1912)



Figure 8: Follower of Goya, *Portrait of Rafael Esteve Vilella*, copy after the portrait in the Valencia Museum of Fine Arts, dimensions unknown, Düsseldorf exhibition catalogue, 1912



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Figure 11d: *Portrait of a Lady*, After Goya, date unknown, Witt Library

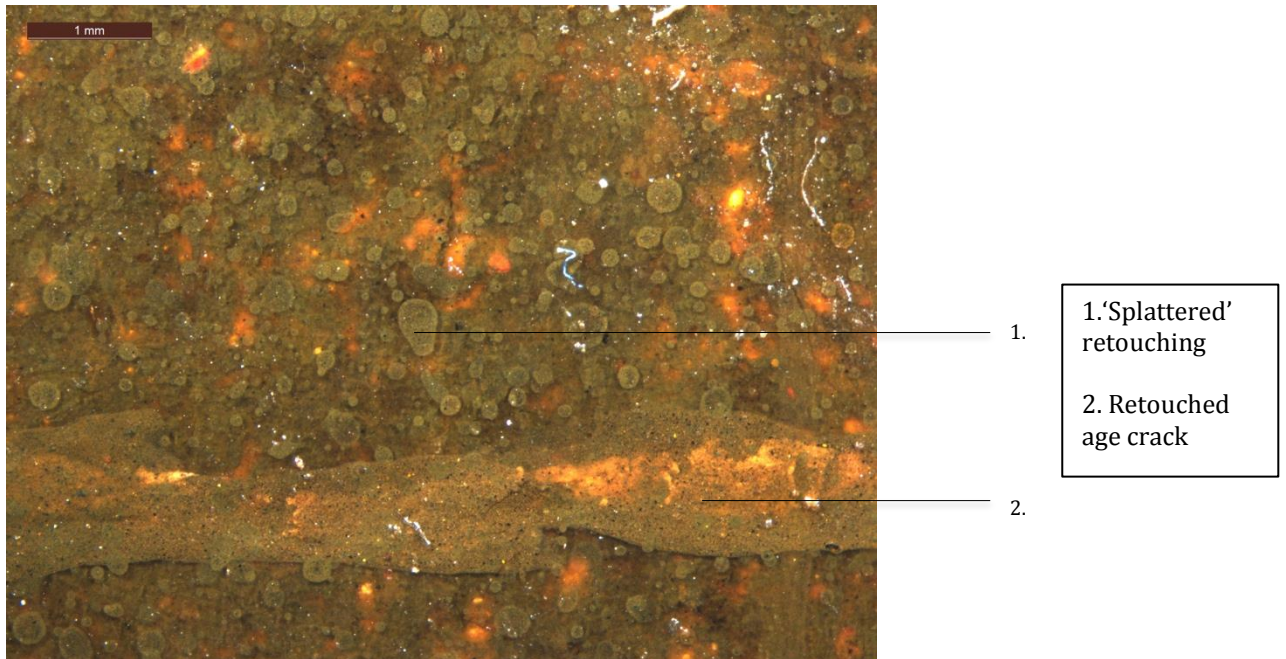


Figure 12: Micrograph detail taken from the locally painted green background. The image shows retouching covering an age crack that has been filled. Also visible is an extensive retouching campaign visible in the form of rounded 'splatter marks' (Micrograph: Emma Jansson).

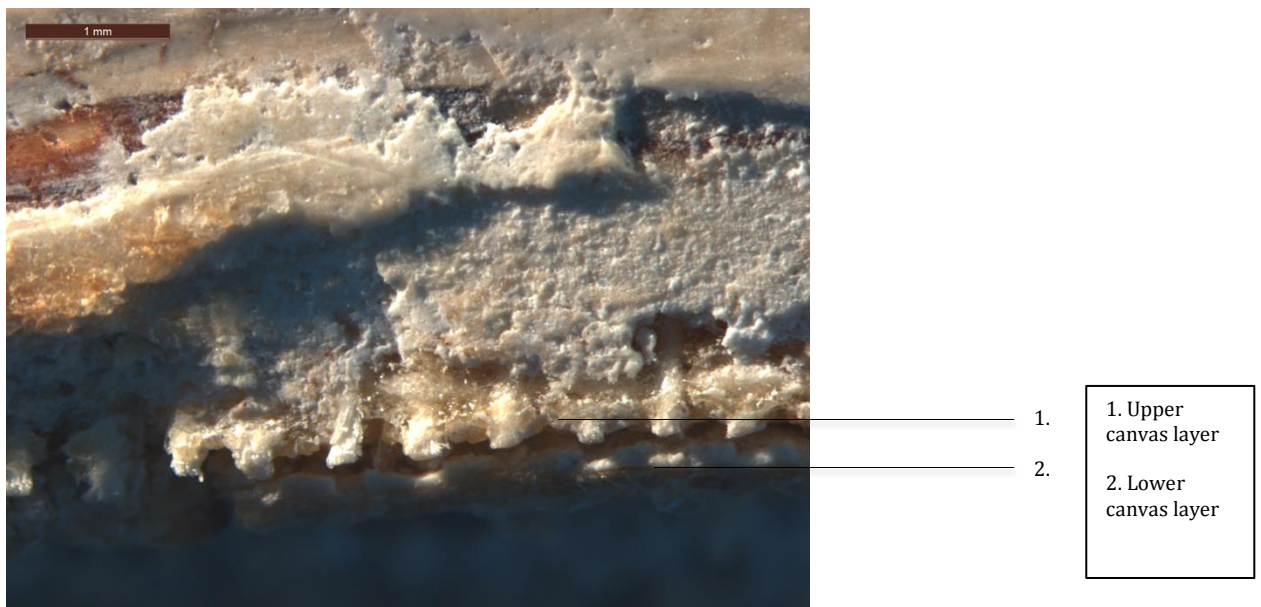


Figure 13: Micrograph detail taken from the left-hand edge of the painting. The image shows the uppermost (presumably original) canvas layer, visible underneath a layer of fill, as well as a second, underlying canvas layer. It appears as if both canvases were cut prior to lining with the current lining canvas (Micrograph: Emma Jansson).

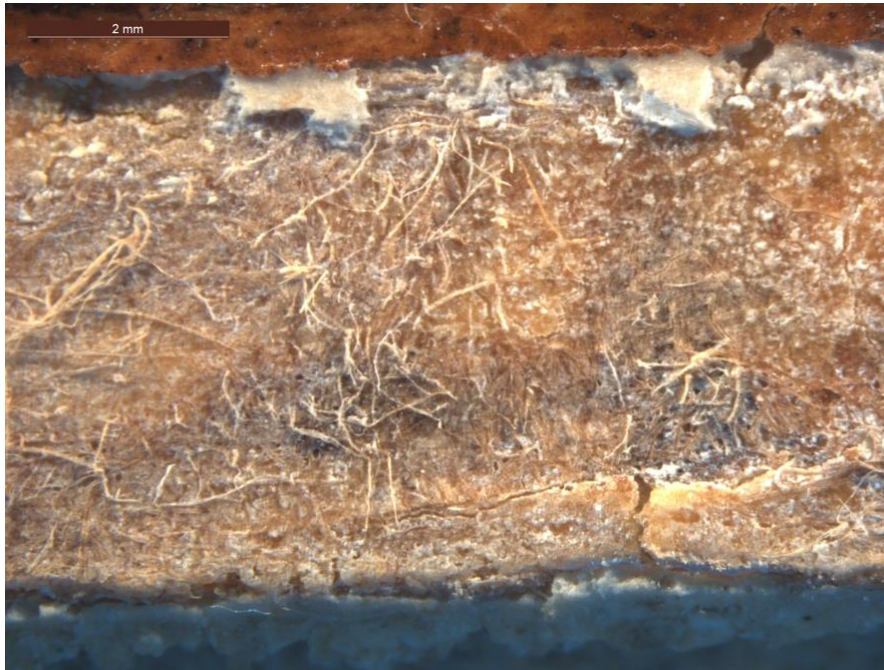


Figure 14: Micrograph detail taken from the lower left-hand edge of the painting. The image shows the fibrous, paper-like material that extends underneath the lower fill layer on the edge of the painting (Micrograph: Emma Jansson).

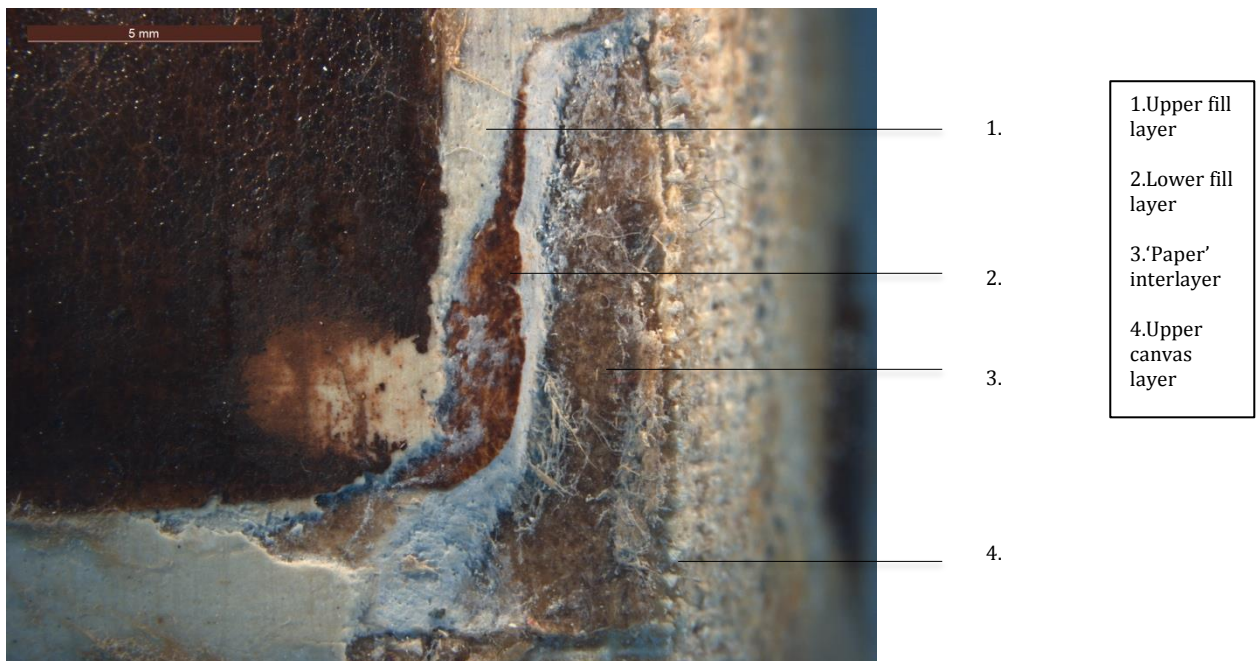


Figure 15: Micrograph detail taken from the top right corner. The image shows the two layers of fills and retouching, followed by the interlayer of 'paper', which is placed on top of the upper canvas layer. The solubility test of the retouching on the upper fill layer shows the two stages of retouching: the upper dark-red layer, soluble in Shellsol A, and the lower light-red layer, which is soluble in de-ionised water. (Micrograph: Emma Jansson)



Figure 16 Micrograph detail of abraded paint in the sitter's torso (Micrograph: Emma Jansson).

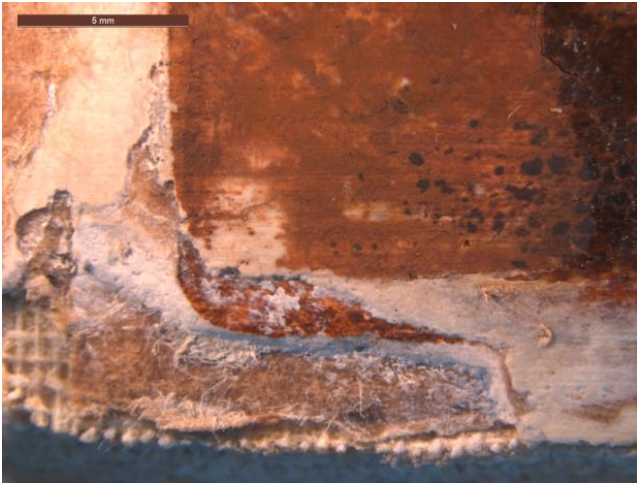


Figure 17a: Stage 1, after the removal of the dark-red retouching using Shellsol A.



Figure 17b: Stage 2, after the removal of the orange retouching using de-ionised water.

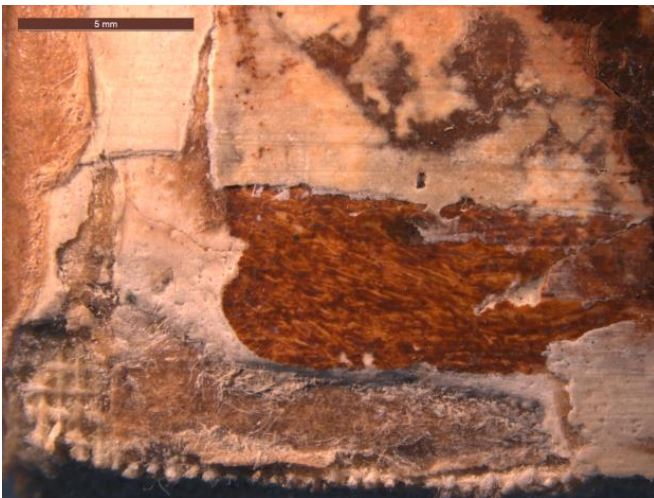


Figure 17c: Stage 3, during removal of the upper fill layer, revealing the lower fill layer (retouching soluble in propan-2-ol).

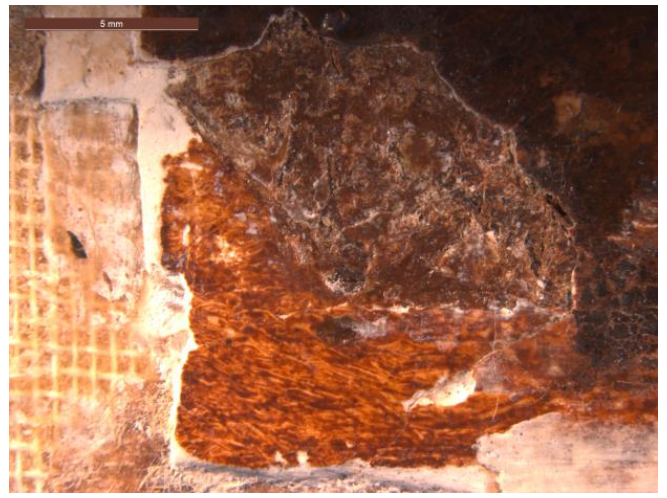


Figure 17d: Stage 4, after removal of the upper fill layer, revealing an undulating layer with dark-red paint.

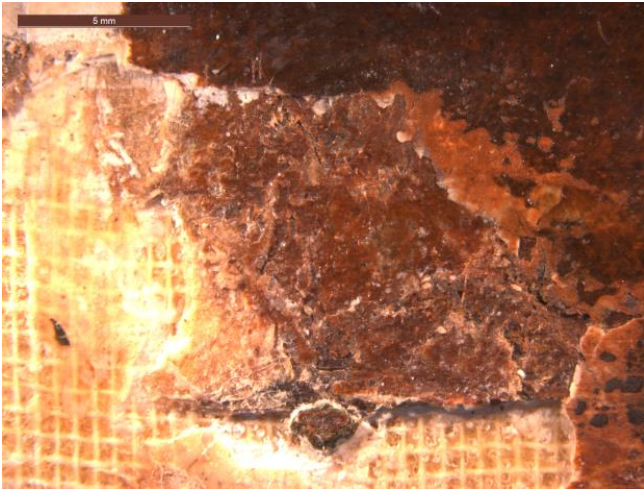


Figure 17e: Stage 5, after removal of the lower fill layer.

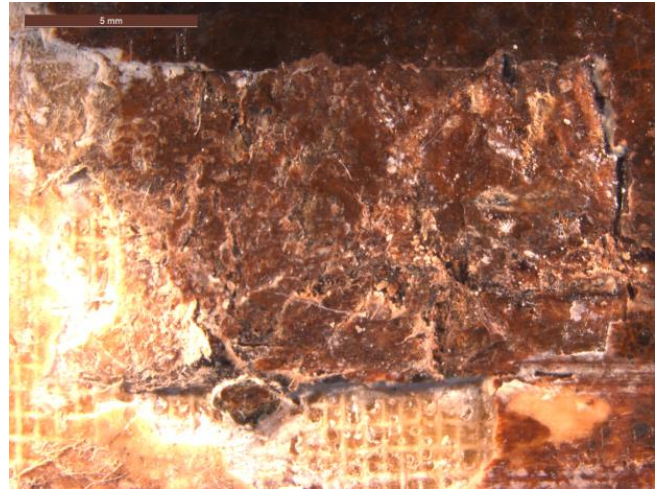


Figure 17f: Stage 6, further removal of the upper fill layer, revealing more of the undulating layer.

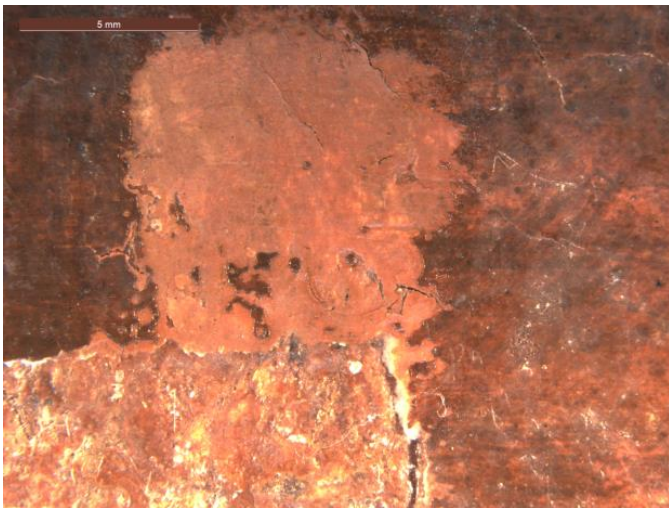


Figure 17g: Stage 7, further removal of the dark-red retouching using Shellsol A.

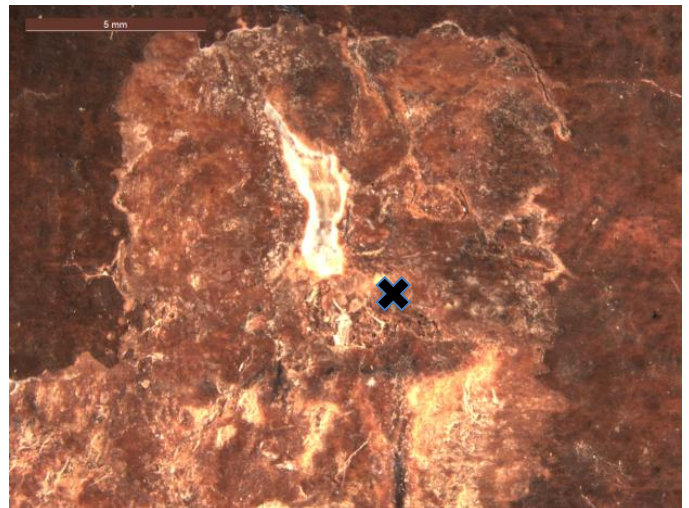


Figure 17h: Stage 8, further removal of the upper fill layer. The layer revealed is consistent with the undulating layer at the edge of the painting (sample site for sample 11 indicated by the cross).



Figure 18a: Francisco de Goya, *Retrato del Infante Carlos María Isidro Hacia*, 1800, oil on canvas, 74 x 60 cm, Museo del Prado, Madrid



Figure 18b: *María Josefa de Borbón y Sajonia, infanta de España*, 1800, oil on canvas, 72 x 59 cm, Museo del Prado, Madrid



Figure 18c: *Luis de Borbón, príncipe de Parma y rey de Etruria*, 1800, oil on canvas, 72,5 x 59,4 cm, Museo del Prado, Madrid



Figure 18d: *Antonio Pascual de Borbón y Sajonia, infante de España*, 1800, oil on canvas, 72,5 x 59,3 cm, Museo del Prado, Madrid





Figure 19: Francisco de Goya, *Portrait of Carlos IV and his Family*, 1800, oil on canvas, 280 x 336 cm, Museo del Prado, Madrid



Figure 20: Francisco de Goya, *Portrait of Dona Joaquina Candado*, 1790, oil on canvas, 169 x 118.3, Valencia Museum of Fine Arts



Figure 21: Attributed to Francisco de Goya, *Portrait of Rafael Esteve Vilella*, oil on canvas, 100.6 x 79.5 cm, Valencia Museum of Fine Arts

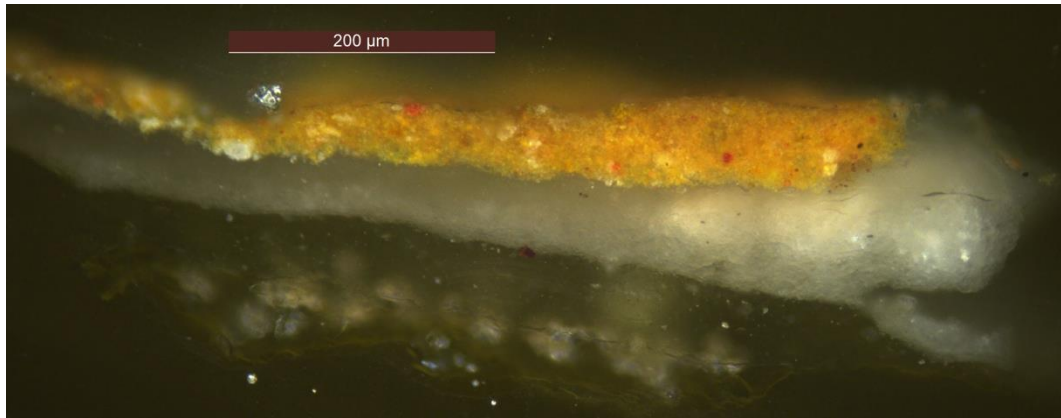


Figure 22a: Cross-section sample taken from the excavated, top-left corner of the painting (sample site in fig. 14h). 20x magnification, ordinary light (Cross-section: Emma Jansson).

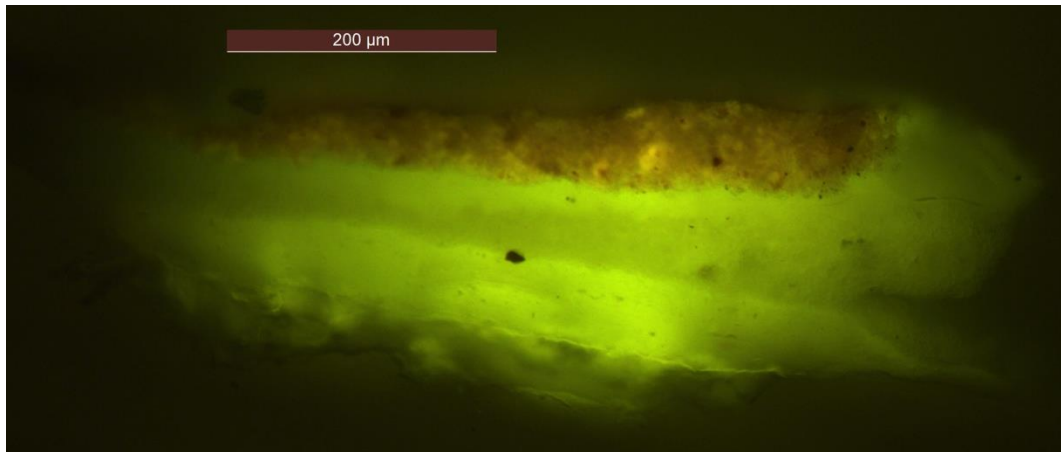


Figure 22b: Sample from fig. 19a. 20x magnification, ultraviolet light. The fluorescent layer between the upper white ground layer and the orange-red priming is indicative of an organic medium.

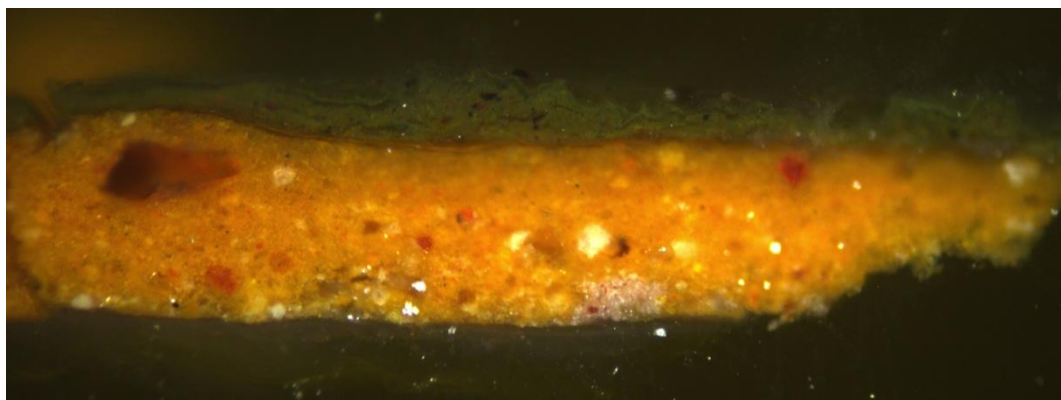


Figure 23a: Cross-section sample taken from the locally painted green background. The sample shows the red pigment particles, identified as iron oxide, as well as the characteristic, rounded white pigment particles of lead white. 20x magnification, ordinary light (Cross-section: Emma Jansson).

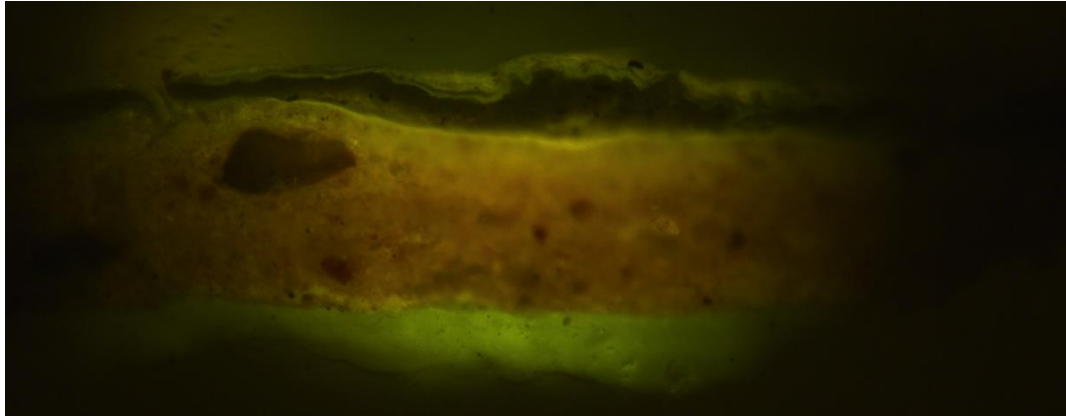


Figure 23b: Sample from fig. 20a. 20x magnification, ultraviolet light. The fluorescent layer between the orange-red priming and the green paint layer is indicative of an organic medium.<sup>48</sup>

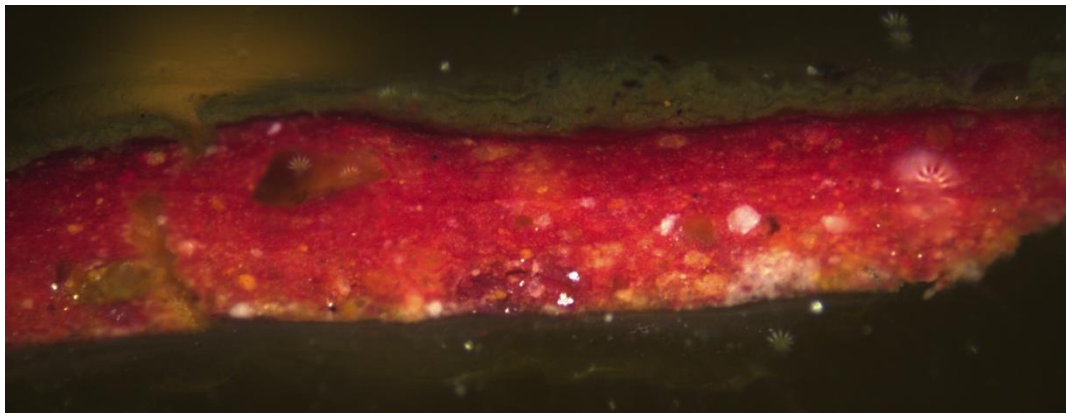


Figure 24: Staining test using Acid Fuchsin on the sample from fig. 20a-20b. The stain confirms the presence of protein in the orange-red priming, as well as the thin, organic layer on top.

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<sup>48</sup> Please note that the absence of the white ground layer in this sample is due to delamination between the white ground and the orange-red priming during the sample-taking process. The organic layer present between the white ground and orange-red priming in fig. 18a-18b is still visible at the bottom of the sample.

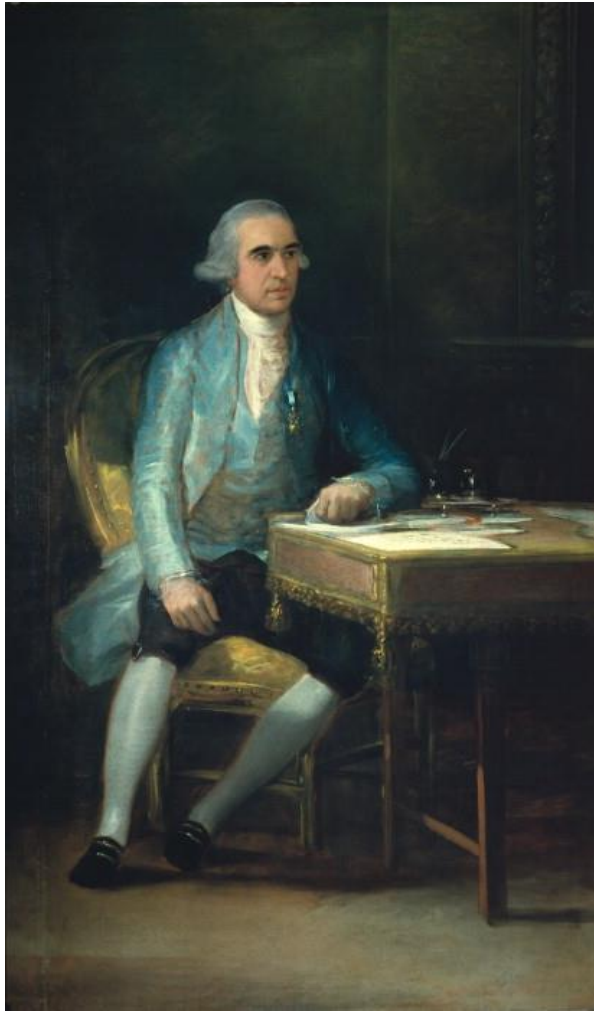


Figure 25: Francisco de Goya, *Portrait of Don Francisco de Saavedra*, oil on canvas, 200.2 x 119.6 cm, Courtauld Gallery, London

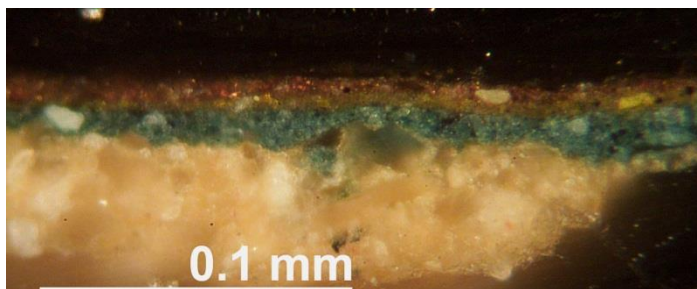


Figure 26: Cross-section sample taken from the red desk in *Portrait of Don Francisco de Saavedra*, showing a light-orange ground layer (Cross-section: Dr. Aviva Burnstock, Courtauld Institute of Art).



Figure 27: Francisco de Goya, *The Forcibly Bewitched*, 1798, oil on canvas, 42.5 x 30.8 cm, National Gallery, London



Figure 28: Francisco de Goya, *Portrait of the Countess Chinchón*, 1800, oil on canvas, 216 x 144 cm, Museo del Prado, Madrid