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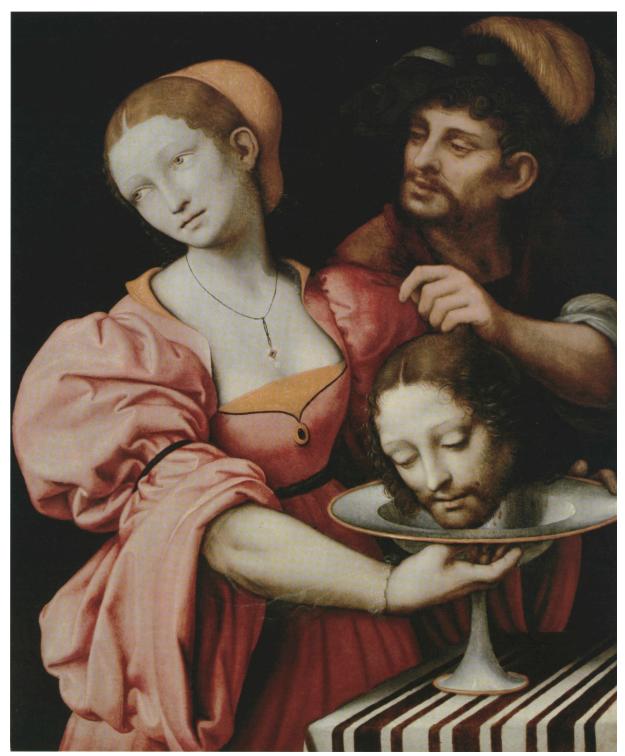


Plate 1 Giampietrino, Salome (NG 3930), c.1510–30. Poplar,  $68.6 \times 57.2$  cm.

# Giampietrino, Boltraffio, and the Influence of Leonardo

### LARRY KEITH AND ASHOK ROY

Leonardo da Vinci's activity in Milan, datable in two periods from 1482 to 1499 and from 1507 to 1512/13, saw the production of some of his most important paintings, including the National Gallery's own Virgin of the Rocks (Fig.1).1 It was also notable for the emergence of a group of Milanese painters that adopted his manner, whether in appropriating his compositional motifs or in responding to his extraordinary painterly effects. These artists are well represented in the National Gallery, and even a superficial survey of works by Boltraffio, Bramantino, Cesare da Sesto, Giampietrino, Luini, Marco d'Oggiono, Martino Piazza, de Predis and Solario in the Collection shows something of the extent and variety of Leonardo's influence in Milan. The recent cleaning and restoration of National Gallery pictures by two of these artists - Giampietrino's Christ carrying his Cross (Plate 2) and his Salome (Plate 1), and Boltraffio's Virgin and Child (Plate 3 and Fig. 10)2 - has allowed the opportunity to examine closely their materials and technique, and, by extension, to consider more fully the nature and degree of their debt to Leonardo.

While a general scholarly consensus has emerged concerning Giampietrino's oeuvre, only one picture is dated, there are no signed works, and therefore all of his works are assigned attributions.3 Little is known about his life and the very use of the name Giampietrino is conjectural, it having been applied to this group of pictures as a result of its appearance in Leonardo's Codex Atlanticus in a list of other painter/pupils.4 A tradition dating back to Lomazzo has tied this reference to a 'Pietro Rizzo' or 'Pietro Riccio milanese pittore, discepolo di Leonardo da Vinci'.5 Recent scholarship has shown Lomazzo's (Giovanni) Pietro Rizzi

to have been active significantly earlier (documented between 1481 and 1493) than the body of work now given to Giampietrino, whose single known dated work is from 1521.6 While Lomazzo's identification of Leonardo's 'Giampietro' in his treatise, itself written between 1497 and 1500, may be correct, recent archival research has linked the pictures now known as Giampietrino with yet another painter, Giovanni Pietro Rizzoli, who seems to have been active until around 1540.7



Plate 2 Giampietrino, Christ carrying his Cross (NG 3097), c.1510-30. Poplar,  $59.7 \times 47$  cm.



Fig. 1 Leonardo da Vinci, The Virgin of the Rocks (The Virgin with the Infant Saint John adoring the Infant Christ accompanied by an Angel) (NG 1093), c.1508. Wood,  $189.5 \times 120$  cm.

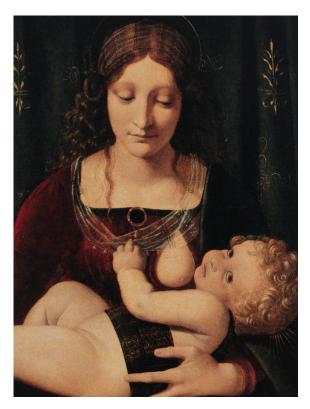


Plate 3 Giovanni Antonio Boltraffio, The Virgin and Child (NG 728), c.1493–9. Walnut,  $92.7 \times 67.3$  cm. Detail.

However designated, the paintings traditionally ascribed to Giampietrino<sup>8</sup> do form a stylistically individual and coherent whole. His main stylistic influences seem to have been Marco d'Oggiono, Cesare da Sesto and, above all, Leonardo. His several large altarpieces have recently been given a relative chronology based on a perceived stylistic evolution, but also typical of the artist (and much more difficult to date) is the production of small-format halflength representations of classical or biblical subjects, often executed in multiple versions with varying degrees of studio participation and considerable variation in quality. 10 Both the Salome and Christ carrying his Cross fall into this latter category, and significantly both have compositions that are clearly derived from Leonardesque prototypes.

A silver-point study of Christ carrying his Cross by Leonardo now in Venice (Fig. 2) is clearly the compositional source of the National Gallery Giampietrino.<sup>11</sup> Generally dated between 1497 and 1500, it and other preparatory drawings may have been studies for a painting by Leonardo which has been lost or, perhaps no less likely, for a painting executed by a pupil or associate. Giampietrino's picture is one of many by a variety of artists active in and around Lombardy which reflect this composition.<sup>12</sup>

The National Gallery panel is one of several more or less replica versions of the subject by Giampietrino, 13 suggesting the repeated use of the same studio cartoon. Infra-red reflectography clearly shows the traces of the cartoon transfer<sup>14</sup> in the National Gallery version (Figs. 3a and 3b), particularly visibly delineating the contours of the brow, eyes, and nostril. Another version now in Budapest (Fig. 4), shows similar traces of cartoon transfer (Figs. 5a and 5b); the use of the same cartoon for both pictures was proved beyond reasonable doubt by the exact coincidence of a tracing of the London picture laid on to the Budapest panel. 15

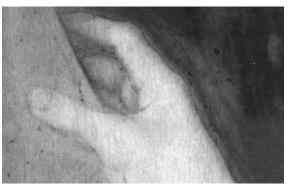
Infra-red examination of two Giampietrino paintings now in the Brera, The Magdalen seated in Prayer (Plate 4) and The Magdalen, both show traces of the spolvero technique of cartoon transfer, where charcoal is rubbed through holes pricked along the contours of the drawn cartoon.<sup>16</sup> The fact that other versions exist of each of these pictures is further



Fig. 2 Leonardo da Vinci, Christ carrying his Cross, 1497-1500. Silver-point on grey prepared paper, 11.6 × 9.1 cm. Venice, Galleria dell'Accademia.



Fig. 4 Giampietrino, Christ carrying his Cross. Wood, 62 × 49 cm. Budapest, Szépművészeti Múzeum.





Figs. 3a and 3b Giampietrino, Christ carrying his Cross (NG 3097). Infra-red reflectogram details showing the traces of cartoon transfer. The use of carboncontaining black pigment in the imprimitura paint mixture has somewhat reduced the contrast between the black used in the underdrawing and the white gesso ground.





Figs. 5a and 5b Giampietrino, Christ carrying his Cross. Budapest, Szépművészeti Múzeum. Infra-red reflectogram details showing the traces of cartoon transfer.



Plate 4 Giampietrino, The Magdalen seated in Prayer. Wood, 60 × 50 cm. Milan, Brera.

indication of the level of production and common reuse of cartoons in the workshop.<sup>17</sup>

The composition of the Salome is also derived ultimately from another Leonardo composition, a lost Leda and the Swan, here shown in a contemporary copy by another Milanese artist close to Leonardo, Cesare da Sesto (Fig. 6). Numerous studies from Leonardo's hand have survived which emphasise the indebtedness of Giampietrino to Leonardo's composition, such as the study for the Head of Leda from the Royal Collection (Fig. 8).18 In the Salome the contrapposto twist of the head, torso and outstretched arm is clearly based on the Leonardo prototype; this borrowing is more clearly visible in another related Giampietrino composition, the Suicide of Cleopatra (Fig. 7) in the Louvre, Paris, in which the figure is unclothed but otherwise virtually identical to Salome. The underdrawing of the Salome was executed in brown paint containing no carbon and hence undetectable by infra-red examination, 19 but the same cartoon was evidently used for both it and the Cleopatra. A superimposition of the Salome and the Cleopatra in false colour (Plate 5), adjusted to scale, shows the figures to be almost exactly aligned, with only minor adjustment of the outstretched arm. Remarkably, the hand of Cleopatra that holds the asp has been shifted slightly and given to the executioner in the Salome. Clearly the cartoon has been reused, and it is not difficult to imagine the elaborately bunched drapery around Salome's shoulder and sleeve or the head of the Baptist as the subjects of separately drawn studies, modified and added to the basic cartoon composition. Such a study from Giampietrino does exist for the head of the Madonna in the altarpiece, dated 1521, for San Marino a Pavia, now in the Fitzwilliam Museum, Cambridge (Fig. 9). In fact the rather less convincingly constructed figure of the executioner is perhaps due to his being not entirely successfully fitted into a pre-existing composition.

Yet Giampietrino's interest in and borrowings from Leonardo are not restricted to matters of composition alone, but also include other aspects of painting technique. The strong chiaroscuro

and dark backgrounds of Giampietrino's smallformat panels are clearly an attempt to emulate the more striking pictorial effects that Leonardo had introduced to Milan.<sup>20</sup> However, it is not certain how much direct contact Giampietrino would have had with Leonardo's actual painting methods and it would be misleading to assume that the imitation of Leonardo's effects required direct reproduction of his techniques. Examination and analysis of the National Gallery Giampietrino panels demonstrate this distinction.

Christ carrying his Cross and Salome have standard supports for this period: both are on panels identified as poplar<sup>21</sup> and have white gesso grounds bound in glue. The visual effect of the pure white of the gesso is diminished by the application of stiffly brushed, rather opaque imprimiture of a light brownish grey in the case of the Christ<sup>22</sup> and of a similar warm mid-grey for the Salome. The ridged texture of the underlayer is visible through the surface paint and the brushstrokes are unrelated to compositional form. This *imprimitura* is visible in many areas of Christ's flesh, for example on the chin above the jawline, around the eye-socket (Plate 6) and in the middle tones of the lower torso. In the Salome the underlayer is also visible as a warm tone, particularly in the half shadows of her hand and forearm, the Baptist's left cheek and temple, and much of the executioner's flesh. It is particularly evident in his white sleeve. The use of these imprimiture presumably played a key role in the intended tonal modelling; however, both greater transparency and local wearing of the paint layers on top have increased their visual effect beyond that intended by the painter.

This underlayer was not a part of the optical build-up of the draperies, even within the different techniques employed in the two pictures. In Christ carrying his Cross the deep red drapery is remarkable for the manner of its construction: beneath dark red lake glazes lies an unusual strongly coloured dense red-brown underpaint consisting of vermilion, red earth and black, with an increased proportion of black used under the shadows of the folds.<sup>23</sup> The overall effect is restrained in spite of the intensity of colour and creates a more naturalistic chromatic effect. Some fading of the upper red glaze, the extent of which can be assessed



Fig. 6 Cesare da Sesto, Leda and the Swan. Wood,  $96.5 \times 73.6$  cm. From the collection of the Earl of Pembroke, Wilton House.



Fig. 7 Giampietrino, The Suicide of Cleopatra. Wood, 73 × 57 cm. Paris, Musée du Louvre. © Photo R.M.N.

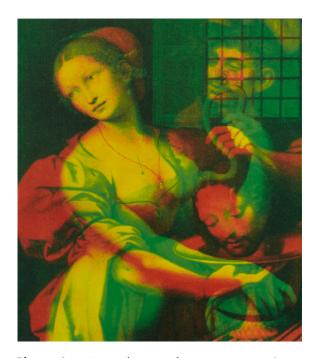


Plate 5 Superimposed image of Giampietrino's Salome and Cleopatra. Digital images of the two panels have been rescaled so that they have the same resolution (in pixels per millimetre) with respect to the original paintings. The monochrome images of Salome and Cleopatra have been assigned to the red and green channels respectively in this superimposed image. The vellow areas show where the two compositions align, suggesting the use of the same cartoon as the basic compositional tool.



Fig. 8 Leonardo da Vinci, Head of Leda, detail. Pen and ink over black chalk on paper, 19.8 × 16.6 cm (irregular). Windsor, Royal Collection: Leoni volume (12516). Detail of the principal study from the sheet.

from protected paint at the edge of the picture, has not significantly affected the carefully considered intensity of the drapery colour. A similar layer structure, although with less black pigment, occurs in the darker parts of Salome's red dress (Plate 7) (in the skirt and the lower sleeve of the far arm). In contrast, the elaborate drapery of the near sleeve and bodice makes use of a more conventional system of modelling, with a red glaze over a light pink underpaint of white mixed with red lake. Here, fading is more extensive and more distorting.

The modelling of the flesh relies on fairly straightforward methods. In the Christ, the basic structure is worked as a single layer of light-coloured paint, varying in thickness and as a result also in tone; this handling is particularly clear around the eye-socket and across the bridge of the nose, where the thinner paint is modified by the warmer colour of the underlying imprimitura (see Plate 6). In Giampietrino's modelling of flesh, the final stage in the production of the illusion of relief was characteristically achieved by the application of dark translucent glazes to create the deepest shadows and their transitions. These glazes were used to depict the strongest shadows in the eye-socket, forearm and torso. The range of contrast in modelling was restricted by the application of a final, extremely thin overall toning layer consisting of warm dark pigments and black in a medium essentially of walnut oil, with a little resin. This unusual pigmented glaze layer is contemporary with the rest of the paint; it cannot be seen in any of the craquelure network and in cross-section is applied directly on to the lower paint layers, with no intervening varnish. Although applied to the entire picture, it is most important in its effect on the lighter values of the flesh, which appear selectively muted (see Plate 8).<sup>24</sup>

In the Salome, examination of the method of flesh painting reveals an additional stage in its build-up: forms summarily transferred from the cartoon are worked up and modelled in thin, fluid translucent dark brown paint over the imprimitura. The basic chiaroscuro created in this preliminary working is retained in the final modelling - not in the deepest shadows, but as the visible underlayer for the thinly scumbled transitional half-tones and lighter valued shadows. This scumbled undermodelling is distinguishable

from the more conventionally glazed shadows by its characteristically cooler tonality, which is an optical effect of thin light-coloured paint applied over dark. This technique provides a luminous quality unattainable with glazing of dark over light and is particularly successful in creating more subtle, sculptural modelling. The effect is seen most clearly in the triangular shadow at the base of Salome's throat in the transition between highlight and shadow at the line of her jaw. The same technique is evident in the left eye-socket of the Baptist and the executioner's cheekbone. The darker and warmer shadows were then created by final glazing, as in the Christ.

Some idea of the basis of these techniques for painting flesh can be gauged from the unfinished Head of a Young Girl in Parma (Plate 9), which is attributed to Leonardo.25 In this abbozzo, on poplar panel, it is possible to see how Leonardo develops light and shade in the construction of flesh, particularly illustrating the importance of the dark undermodelling in the scumbled halfshadows. Giampietrino's method in the Salome seems close to this practice.

However, to assess properly the relationship of these works to Leonardo's technique, account must be taken of changes in condition, most fundamental of which are the colour changes that have occurred in Giampietrino's paint layers. In the Christ these are most significant in the appearance of the flesh paint, where red lake has faded, resulting in a greyer skin tone than had been depicted originally. We have noted above that some loss of colour of the red glaze on the drapery is less distorting.

Changes in materials have affected the appearance of the Salome even more fundamentally. This is largely the result of a more ambitious composition, where a greater number of figures required a broader range of colour and tone to provide the desired overall balance, local variety and directed lighting. The present dominance of red, pink and brown tones would have been complemented by the colour of the stripes on the tablecloth; these are now a deep rust colour but were originally a strong, saturated, rich green, worked in a 'copper resinate' glaze. The degree of this change, and the implications for the overall compositional balance, can be judged from the extreme lower edge where something of the original

colour remains unaltered (Plate 10). A similar transformation, of lesser compositional significance, has occurred in the copper-containing glazes of the executioner's collar and hat, laid over dark orange-brown paint, which would have created an olive-brown colour. As these glazes are underpainted with darker tones than those used in the tablecloth, the effect of their colour change is considerably less important for the reading of the picture. The red colours themselves have shifted as well; as we have noted above, the fading of the red lake in Salome's dress is now particularly evident where it has occurred over a lighter underpaint, which gives undue prominence to the light underlayer. The actual degree of fading is also probably greater as a result of light being reflected rather than absorbed by the underpaint, in effect giving the overlying glaze a double exposure of light.<sup>26</sup> This localised fading has misleadingly increased the tonal contrast between the near and far sides of the dress; at



Fig. 9 Giampietrino, Head of the Madonna (study for the altarpiece of San Marino a Pavia, 1521). Red and black chalk on red prepared paper, 23.4 × 16.9 cm. Cambridge, Fitzwilliam Museum.

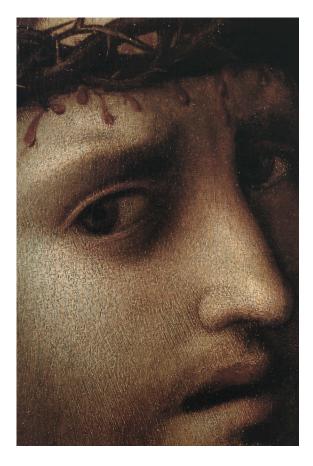


Plate 6 Giampietrino, Christ carrying his Cross (NG 3097). Detail showing the warmer tone of the underlying imprimitura visible in the transitions around the eye-socket; the deepest shadows are created with darker translucent glazes.

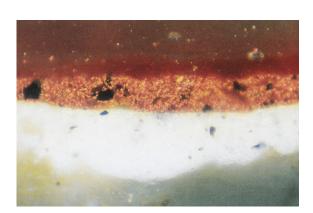


Plate 7 Giampietrino, Salome (NG 3930). Crosssection of deep plum-coloured shadow from the skirt of Salome's dress showing red lake glaze over a redbrown underpaint of red earth mixed with black. A fragment of gesso and the dense, warm grey imprimitura, containing lead white and a little brownish black, are present beneath. Original magnification 650 ×; actual magnification 540 ×.

the same time it has diminished the colour intensity by comparison with the unfaded part that can be seen along the bottom edge, where it has been protected by the frame rebate (see Plate 1). In comparison, the underpaint of the red drapery in Christ carrying his Cross and in the darker parts of Salome's dress, while now more visible, was of a roughly similar tone to the subsequent glaze.

Fading of red lake pigment has also altered the appearance of Salome's flesh. While some colour remains in parts of the face, Salome's complexion is unnaturally pale and is likely to have been generally considerably more pink. This can be deduced from the presence of red lake pigment in the flesh mixtures which is detectable in cross-section, particularly in UV light;<sup>27</sup> the lake, although not applied as a glaze, has faded within the light-coloured flesh paint matrix. Also, a semi-transparent undergarment passing over the shoulders and across the breast was originally depicted largely as a relative absence of colour in flesh shown beneath it; the faded uncovered flesh, originally rosier, is now virtually indistinguishable from its veiled counterpart.<sup>28</sup> The diaphanous quality of this undergarment is now only clearly visible where it passes over the far shoulder, which is darker, and where it continues down over the arms, particularly at the cuff around the wrist. A similar distinction in flesh tone can also be

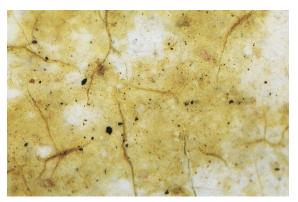


Plate 8 Giampietrino, Christ carrying his Cross (NG 3097). Photomicrograph of the shadow of Christ's finger taken directly on the picture surface under the compound microscope in reflected light at 250 x. The final thin brown toning (pigmented) glaze applied over the entire picture surface, which exerts an optical effect most strongly in the light passages (particularly in the flesh paint), is visible over the pale coloured underlayer. Actual magnification 220 x.

assumed to have been present originally between the arm and wrist. This change in Salome's complexion, which now appears virtually undistinguishable from that of the Baptist, has eliminated one of the painter's key conceits: a demonstration of the contrasts between the swarthy executioner, the delicate blush of Salome, and the deathly pallor of the Baptist.<sup>29</sup>

Rich, decorative local colour was an important constituent of Giampietrino's style, and its use is instructive for what it reveals about his leonardismo. In Leonardo's paintings an overall pictorial unity produced by a tightly controlled, restricted range of tone and value was a central feature. The sculpture-rivalling relief of the National Gallery's cartoon of the Virgin and Child with Saint Anne and Saint John the Baptist (NG 6337), with its severely restricted palette, illustrates Leonardo's primary concern with the creation of depth through the manipulation of value, not colour. In painting, while he did develop techniques of exploiting colour of diminishing intensity to create aerial perspective, the intrinsic beauty of certain naturally high-key pigments was as a rule deliberately and consistently subordinated to the constraints of his greater tonal discipline.<sup>30</sup> Leonardo's late Saint John the Baptist in the Louvre stands as a clear example of an extremely limited palette achieving an extraordinary sculptural presence. Although Giampietrino may have attempted to create this effect with devices like the toning layer on the Christ carrying his Cross, his use of colour was in general more decorative. Even in its ruined state, enough of an impression of Leonardo's mural of The Last Supper remains to underscore differences in palette with the more highly saturated local colour of Giampietrino's well-known copy in the Royal Academy, London.31

An artist capable of a more subtle understanding of Leonardo was Giovanni Antonio Boltraffio (1467-1516), who was working in Leonardo's studio by 1491<sup>32</sup> and independently by 1498.33 Vasari also mentions Boltraffio studying with Leonardo, and describes and dates the so-called 'Casio Altarpiece', now in the Louvre, to 1500.34 Two other works are documented: a Saint Barbara of 1502 in Berlin (Staatliche Museum) and the 1508 'Lodi



Plate 9 Leonardo (attributed), Head of a Young Girl (La Scapiliata). Poplar, 24.6 × 21 cm. Parma, Museo Nazionale.



Plate 10 Giampietrino, Salome (NG 3930). Detail from the bottom right edge showing protected and relatively unaltered 'copper resinate' green glaze on the tablecloth stripes.



Fig. 10 Boltraffio, The Virgin and Child (NG 728), 1493–9. Walnut,  $92.7 \times 67.3$  cm.



Fig. 11 Boltraffio, The Virgin and Child. Wood, 83 × 63.5 cm. Budapest, Szépművészeti Múzeum.

Altarpiece' in Budapest (Szépművészeti Múzeum).<sup>35</sup> The chronology of his other works is largely assigned on the basis of stylistic evolution, and, not surprisingly, Boltraffio's style was most strongly influenced by Leonardo in the last years of the Quattrocento.36

The National Gallery's Virgin and Child (Plate 3 and Fig. 10) is assigned to this period, and is stylistically associated with the Girolamo Casio and Madonna and Child, both in Milan (Brera, Plate 11; and Museo Poldi Pezzoli, Plate 12) and a Virgin and Child in Budapest (Fig. 11).<sup>37</sup> While the composition of *Girolamo Casio* has its source in the Leonardo Portrait of a Musician (Milan, Pinacoteca Ambrosiana), and the three Boltraffio Madonnas mentioned above owe much to Leonardo's 'Litta Madonna' (St Petersburg, Hermitage), it is clearly evident that in Boltraffio, Leonardo's influence is less literal than in the case of Giampietrino.

In the National Gallery Virgin and Child, Boltraffio's more typically creative use of Leonardo's imagery is expressed through an apparently more faithful assimilation of his technique. Most striking is Boltraffio's use of a dark underpainting (Plate 13) of some solidity for much of the composition and this seems to have been a key part of Leonardo's method, and can be seen in a number of unfinished works, such as The Penitent Saint Jerome (Rome, Pinacoteca Vaticana) and The Adoration of the Magi (Florence, Uffizi). The costume of the Ambrosiana Musician is a particularly clear case, where the translucent, brushed quality of the unfinished costume is all the more striking for the contrast with the high degree of finish in the rest of the painting. In the National Gallery Virgin of the Rocks a similar dark understructure can be seen through the paint layers in many parts of the picture, and is most clearly evident in the unfinished left hand of the angel. A number of paint cross-sections from the edges of the panel indicate the widespread use of this dark initial painting stage (Plate 14). Boltraffio, like Leonardo, used this dark layer both as a relatively opaque, flat blocking-in of the composition and as a more elaborated undermodelling of form of a type used in the Parma Head of a Young Girl (see Plate 9). The presence of Boltraffio's dark underpaint can be seen in the more cracked parts of the picture, particularly underneath the sky and in the landscape to the left. The layer is apparently thinner beneath the areas of flesh and accordingly influences the tonality of these passages less markedly. Analysis of the binding medium shows the main component to be egg tempera with a little oil, with only drying oil (walnut) in the overlying paint layers.<sup>38</sup>

The National Gallery Boltraffio has suffered from some unusual drying faults, which stem from the painting techniques employed. These have resulted both in wide shrinkage fissures, leaving islands of surface paint exposing the underlayers, as well as severe wrinkling in certain areas (Fig. 12).<sup>39</sup> These paint defects are present over much of the picture surface (with the exception of the dark green cloth-of-honour backdrop which contains siccative copper-green pigments<sup>40</sup>) and, significantly, Boltraffio's portrait of Girolamo Casio displays similar severe drying defects in the face, hand and hair. Another aspect of the problematic technique of this group of pictures by Boltraffio is the cracked and rather blanched appearance of the blue draperies, visible in the National Gallery and Milan Madonnas. In the former, the Madonna's blue mantle is painted in several layers of azurite and ultramarine and the degraded appearance is likely to have resulted from both drying problems and deterioration of the pigments. These types of defects are by no means peculiar to Boltraffio, and in fact occur fairly widely throughout Italian panel painting at this time, when the use of the oil medium was still not particularly long established, and its characteristics not well understood.<sup>41</sup> In the case of the National Gallery Boltraffio, the poor drying qualities of the paint might rest on the choice and preparation of walnut oil as the medium. Other factors could be the use of too rich a medium, inadequate drying times between layers, or poor adhesion between incompatible media. Recent analysis of the binding medium of the Virgin of the Rocks has shown that Leonardo used solely walnut oil in all the layers, including the dark undermodelling. Even so, certain areas show severe shrinkage cracking, most notably in the dark cloak of the angel. It is interesting to note that the later works of Boltraffio, which reflect different stylistic concerns, are relatively free of these disfiguring defects in the paint, and appear more simply painted.<sup>42</sup>



Plate 11 Boltraffio, Portrait of Girolamo Casio. Wood,  $40 \times 52$  cm. Milan, Brera.



Plate 12 Boltraffio, Madonna and Child. Wood, 45.5 × 35.6 cm. Milan, Museo Poldi Pezzoli.

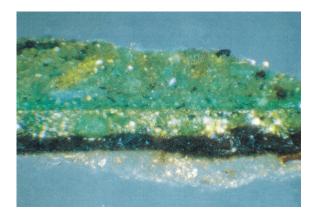


Plate 13 Boltraffio, The Virgin and Child (NG 728). Thin cross-section from dark green hanging behind the Virgin showing a glaze, based on verdigris mixed with some charcoal, over a denser green underpaint. Beneath these green layers, and in much of the composition as a whole, there is a dark blackish-brown underlayer, visible here directly over the gesso. Photographed in a combination of reflected and transmitted light. Original magnification 275 ×; actual magnification 240 ×.

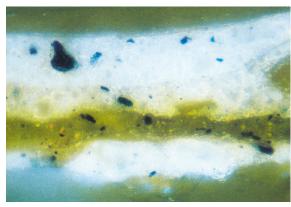


Plate 14 Leonardo da Vinci, The Virgin of the Rocks (NG 1093). Cross-section from highlight on Saint John's heel, left edge. The flesh paint comprises two layers of light-coloured paint, incorporating a little black pigment, over a translucent dark yellowishbrown underpaint. This underlayer is present beneath large areas of the composition, although not in the sky, and is applied over an off-white imprimitura. Original magnification 750 ×; actual magnification 620 ×.

This tentative proposal that Boltraffio's leonardismo extended to aspects of his technique is also important in considering the wider phenomenon of Leonardo's influence on other artists. The study of just Giampietrino and Boltraffio hardly constitutes a comprehensive survey of the so-called Leonardesque painters active in Lombardy; even so, comparison between the two reveals something of the variety of reaction to Leonardo and the shifting relationship between style and technique in that response. On one level Giampietrino appears to have seen Leonardo largely as a source of novel compositions, the recycling and repetition of which might suggest a more superficial (or more commercial) interest. There is also a strong influence of Leonardo's striking pictorial effects, expressed through a technique that is much influenced by him, and that can be seen in the sfumato and relief of the National Gallery Christ carrying his Cross and Salome and in the aerial perspective of the landscape of the Kassel Charity. Nevertheless, Giampietrino's leonardismo is essentially imitative, showing more of an attempted simulation of the painted appearance of Leonardo's works than an understanding of his ideas. Boltraffio, who was never so dependent on Leonardo's compositions, however, seems for a time to have come

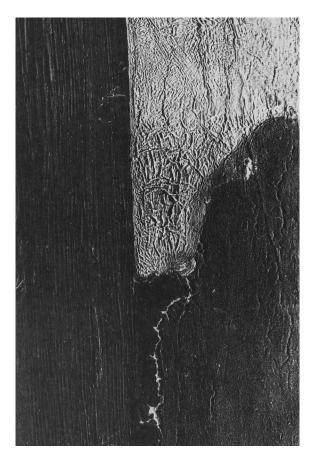


Fig. 12 Boltraffio, The Virgin and Child (NG 728). Detail of the right edge showing wrinkling and cracking of paint layers resulting from the initial drying process, photographed in raking light.

closer to the underlying principles, technical and otherwise, of Leonardo's painting. It is also tempting to see the problematic condition of Boltraffio's more Leonardesque works as an unfortunate legacy of Leonardo's known technical experimentation. Boltraffio's response to Leonardo would seem the more sophisticated, as he eventually assimilated aspects of his master's painting into a style that was his own; Giampietrino's paintings are on the whole more consistently derivative. Yet Leonardo's painting, resulting as it did from an unprecedented amount of observation and investigation of natural phenomena, remained elusively unreproducible.

# Acknowledgements

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# Notes and references

- See Martin Davies, The Earlier Italian Schools, National Gallery Catalogues, London 1961, reprinted 1986, pp. 261-81, and Pietro C. Marani, Leonardo: Catalogo Florence 1989.
- The Salome was cleaned and restored in 1993; the Christ carrying his Cross in 1994. The Virgin and Child by Boltraffio is being restored at the time of writing.
- See Davies, op. cit., pp. 226–7.
- Pietro C. Marani, Leonardo e i leonardeschi a Brera, Florence 1987, p. 12.
- G. P. Lomazzo, Trattato dell'arte della pittura, Milan 1584, p. 695; on p. 679 he lists a 'Pietro Rizzo Milanesi' among a group of artists 'degni d'essere celebrati, e proposti per essempio ed imitare'.

- This is the altarpiece of the Adoration of the Shepherds in San Marino a Pavia, illustrated in Cristina Geddo, 'Le pale d'altare di Giampietrino: ipotesi per un percorso stilistico', Arte Lombarda, 101, 1992, p. 70.
- See Janice Shell, David Allen Brown, Pinin Brambilla Barcilon, Giampietrino e una copia cinquecentesca dell'ultima cena di Leonardo, Milan 1988.
- The traditional use of this name will be maintained in this article.
- Geddo, cited in note 6, pp. 67–82.
- 10. The issue of studio participation had been raised as early as W. Suida, Leonardo und sein Kreis, Leipzig 1929, pp. 212-15, 298-302. See also his entry Pedrini, Giovanni, in Thieme-Becker, Allgemeines Lexikon der bildenden Künstler, 26, Leipzig 1932, pp. 343-4.
- 11. See Carlo Pedretti, 'Giorgione e il Cristo portacroce di Leonardo', Almanaco italiano, 89, 1979, pp. 8-14, and Marani, 'Leonardo e il Cristo portacroce,' Leonardo e Venezia (exhibition catalogue), Milan 1992, pp. 344-57.
- 12. See Marani, Leonardo e i leonardeschi a Brera, cited in note 4, pp. 37-43.
- 13. See Davies, cited in note 1, p. 227.
- 14. The design was transferred either by blackening the reverse of the cartoon with charcoal or inserting a blackened interleaf between it and the panel, after which the contours of the cartoon were retraced with some sort of blunt stylus.
- The two pictures show distinct differences in paint handling and level of finish, which provides additional circumstantial evidence for the existence of a large workshop. In general the Budapest picture is much tighter in execution and more precisely and finely modelled in its flesh painting than the rather broadly painted London version (although the simply painted shadow across the extended forearm of the London picture is perhaps a more convincing rendering of the falling shadow), while its drapery painting appears slightly more schematic. Interestingly, another version of clearly lower quality now in the Academy at Vienna is markedly larger in scale and could not have been made from the same cartoon.
- 16. Pietro C. Marani, 'Per il Giampietrino: nuovi analisi nella pinacoteca di Brera e un grande inedito,' Raccolta vinciana, 23, 1989, pp. 36-46.
- 17. See Pietro Marani's entries in Federico Zeri (ed.), Pinacoteca di Brera: Scuole lombarda e piemontese 1300-1535, Milan 1988, pp. 183-4.
- 18. Leonardo himself developed two variants of the subject in his sketches; a standing figure of the type seen in the da Sesto copy, and a kneeling version (Windsor, Royal Library, n. 12337 r). The Giampietrino Salome and Cleopatra derive

from the standing Leonardo composition; another Giampietrino in Kassel traditionally identified as a Leda but recently redesignated as a Charity is the only known painting reflecting Leonardo's kneeling figure. If the subject of the Kassel picture is indeed a Charity, as Marani maintains, then it is yet another example of a recycled Leonardo composition for a new subject. See Marani, Leonardo: Catalogo completo, cited in note 1, pp. 142-5; Jürgen Lehmann, Staatliche Kunstsammlungen Kassel: Italienische, französiche und spanische Gemälde des 16. bis 18. Jahrhunderts, Fridingen 1980, pp. 130-3; A.E. Popham, The Drawings of Leonardo da Vinci, London 1994 (revised edition), pp. 56-7; Kenneth Clark, Leonardo da Vinci, London 1988 (revised edition), pp. 180-6.

- 19. The transferred charcoal design, where made by spolvero or a tracing method, was presumably brushed away after the elaborated brushed underdrawing.
- 20. For an overview of the artistic situation in Milan before Leonardo's arrival, see Sydney Freedberg, Painting in Italy 1500-1600, Harmondsworth 1975, pp. 381-2.
- 21. Although poplar is the most common support for Italian panel paintings of the late 15th and early 16th centuries, other wood types, such as walnut, are known for Milanese paintings. Examples in the National Gallery Collection include Boltraffio's Virgin and Child (NG 728) discussed in this article, NG 1438 given to a follower of Leonardo, and NG 5752 attributed to de Predis. Jacqueline Marette records a Leonardo panel in the Louvre, La Belle Feronnière, as on walnut. See Connaissance des primitifs par l'étude du bois, Paris 1961, p. 220.
- 22. The relatively small amount of carbon-containing black pigment in this layer is enough to somewhat cloud the image of the carbonaceous transferred underdrawing.
- 23. In this period, modelling of red draperies is usually worked in red lake glazes over underlayers of white, vermilion, vermilion and white or red lake mixed with white. The inclusion of red earth and black pigment in the Giampietrino Christ results in a particularly sombre overall
- 24. This practice appears to be quite rare in Italian painting of the period and may be confined to Milanese technique. Final pigmented glazes can be detected in cross-sections and particularly in thin sections by optical means and by analysis, and can be distinguished from old varnish. See Raymond White and Jennifer Pilc, 'Analyses of Paint Media,' National Gallery Technical Bulletin, 16, pp. 86-7 and note 11.
- 25. This attribution, although not universally accepted, is nonetheless widely held. See

- Marani, Leonardo: Catalogo completo, cited in note 1, p. 110.
- 26. For a fuller account of the fading of lake pigments see David Saunders and Jo Kirby, 'Lightinduced Colour Changes in Red and Yellow Lake Pigments,' National Gallery Technical Bulletin, 15, pp. 79-97.
- 27. Faintly pink translucent flakes of faded lake pigment are just visible under ordinary illumination in several cross-sections, but are revealed more strikingly by their fairly strong orangepink UV-fluorescence under the microscope.
- The forehead of Giampietrino's Madonna and Child (Milan, Pinacoteca del Castello Sforzesca, inv. 304) is a similar example, well preserved, of this technique of suggesting veiled flesh. See Pietro Marani, Leonardo e i leonardeschi nei musei della Lombardia, Milan 1990, p. 137.
- 29. Something of Salome's lost original richness of surface and colour can be imagined by comparison with The Magdalen seated in Prayer (see Plate 4), where the green colour of the book is seemingly unchanged, the red lakes remain well-preserved in the drapery and the flesh paint is distinctly pink. This could be as a result of preservation of the lakes or from the use of inorganic red pigments in the flesh paint. That a noticeably warmer tone for female flesh-painting was commonly employed by Giampietrino can also be supported by the similar rosy appearance of his Diana in the Metropolitan Museum in New York.
- Leonardo wrote extensively on this subject in his notebooks: 'Lights and darks, together with foreshortening, comprise the excellence of the science of painting...Lights and darks, that is to say, illumination and shadow, have an intermediate quality that cannot be called light or dark, but partakes equally of light and dark', or 'Shadows and lights are the most certain means by which the shape of any body comes to be known...', or 'Objects seen in light and shade will be displayed in greater relief than those which are wholly in light or shade,' from Martin Kemp (ed.), Leonardo on Painting, London 1989, p. 88. See also Marcia Hall, Color and Meaning, Cambridge 1992.
- 31. See Shell, Brown, and Brambilla Barcilon, cited in note 7.
- 32. Marani, Leonardo e i leonardeschi, cited in note 4, pp. 10-11.
- 33. Davies, cited in note 1, pp. 88-9.
- 34. 'Fu discepolo Lionardo Giovanantonio Boltraffio milanese, persona molto practica ed intendente, che l'anno 1500 dipinse in nella chiesa della Misericordia fuor di Bologna in una tavola a olio con grand diligenzia, la Nostra Donna col figliuolo in braccio, San Giovanni Batista, e San Bastiano ignudo, e il padrone che

- la fe' fare, ritratto di naturale ginocchioni; opera veramente bella; ed in quella scrisse il nome suo e l'esser discepolo de Lionardo.' Giorgio Vasari (ed. Milanesi), Le vite de più eccellenti pittori, scultori ed architetturi, Florence 1879, Vol. 4, pp. 51-2.
- 35. See Giuliano Briganti, La pittura in Italia: Il cinquecento, Milan 1988, Vol. 2, p. 727.
- 36. Leonardo's first Milanese period, as has been stated, lasted until 1499.
- 37. See Maria Teresa Fiorio's entry in Federico Zeri (ed.), Pinacoteca di Brera: Scuole lombarda e piemontese 1300-1535, Milan 1988, pp. 116-18. The 1908 condition report that blamed the poor condition of the Gerolamo Casio on it having been placed too near a fire ('la tavoletta appariva abbrustolita per essersi trovata presso il fuoco e imbratata di tinte e vernici') must be disputed in the light of other examples in Boltraffio of problems clearly attributable to painting technique. See also Mauro Natale, Musei e Gallerie di Milano. Museo Poldi Pezzoli: Dipinti, Milan 1982, p. 83; and Klara Garas, A Szépmüvészeti Múzeum kepei, Budapest 1973, pp. 58, 249.
- 38. For medium analyses of both the Boltraffio and The Virgin of the Rocks, see Raymond White and Jennifer Pilc, 'Analyses of Paint Media', in this Bulletin, pp. 96-7.
- 39. The disrupted surface, changes in colour and loss of pigment resulting from Boltraffio's technique have led to the complete repainting of the

- Virgin's red tunic, blue mantle, and much of her transparent veil. The use of mastic resin for all these repaints suggests a 19th-century date for this reworking; the repainting of the tunic with kermes lake, generally unavailable in England in the 19th century but apparently still obtainable in continental Europe, suggests a date no later than 1854, when the painting was exported from Italy to the collection of Lord Northwick. See Jo Kirby and Raymond White, 'The Identification of Red Lake Pigment Dyestuffs and a Discussion of their Use' in this Bulletin, p. 69.
- 40. Copper pigments, such as verdigris, appear to have a bi-phasic catalytic action. They appear to enhance the drying rate of drying oils (that is, act as siccatives) and also convert active centres and terminate their production, so functioning as stabilisers or anti-oxidants of the oil paint film.
- 41. For discussion of another contemporary example of degraded blue paint layer structures, see David Bomford, Janet Brough and Ashok Roy, 'Three Panels from Perugino's Certosa di Pavia Altarpiece', National Gallery Technical Bulletin, 4, 1980, pp. 26-8.
- The 1500 'Casio Altarpiece', painted in Bologna, now in the Louvre, has no dark underlayer in the sky, and appears to be constructed quite conventionally with a thin layer of azurite followed by a modelling layer of azurite and lead white, both applied over a light ground.