Leonardo's speaking picture: the 'Salvator Mundi' redivivus

A book by Margaret Dalivalle, Martin Kemp and Robert B. Simon sets out a documented provenance for the 'Salvator Mundi' attributed to Leonardo da Vinci, now in the Collection of the Kingdom of Saudi Arabia, and makes a case for believing that the panel is the prime version of this much-copied composition.

by **CLAIRE FARAGO**

HE PAINTING THAT is the subject of the book under review is a bust-length portrait of Christ as Saviour of the World (Fig.2) derived from schematised Greek Orthodox representations of Christ Pantocrator, a standard icon with a fixed iconography since early Christian times.¹ Related fifteenth-century Latin Christian examples exist in prints, manuscript illuminations and panel paintings made for personal devotion.2 In the Latin west, frontal portraits of Christ also occur as miraculous images made without human intervention (acheiropoieta), such as the Santo Volto in S. Bartolomeo degli Armeni, Genoa, famous in Leonardo's day. The powerful image attributed in this book solely to Leonardo da Vinci (1452-1519) gives a new twist to established convention by exploiting the interface between miraculous images and art. The otherworldly Saviour emerges from darkness, his body enveloped in Leonardo's signature sfumato modelling that catches the light flickering across the surface. He is clad in an embroidered blue silk tunic with an ornately decorated crossed stole, intricate folds of fabric and lustrous and transparent jewels. His exquisitely painted pale right hand is raised and he holds a diaphanous celestial globe with the other.

Although scholarship on the painting has always interpreted the hand solely as 'blessing', it appears as (or very close to) the traditional Greek gesture of teaching or speaking in images of the Pantocrator placed in Orthodox domes and apses including functioning Catholic churches in

My thanks to Barbara Berrie, David Alan Brown, Chrysa Damianaki, Margaret Dalivalle, Maria Evangelatou, Matthew Landrus, Ben Lewis, Dianne Dwyer Modestini, Nicholas Penny, Robert Simon and Frank Zöllner for generously sharing information and expertise. remain solely responsible for any remaining errors and the views expressed here. The present author's brief review of this book, submitted 4th November 2020, is scheduled for publication in Renaissance Quarterly 74, no.4 (winter 2021). The review article published here, much broader in scope, also takes into account scholarship

published up to August 2021.

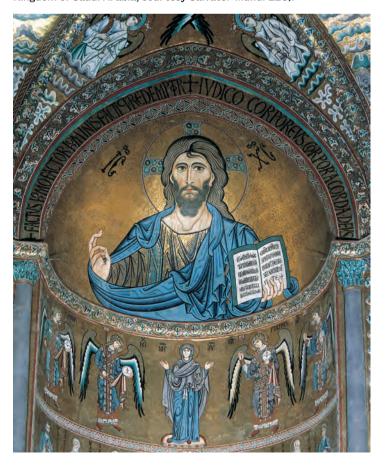
1 Leonardo's Salvator Mundi and the Collecting of Leonardo in the Stuart Courts. By Margaret Dalivalle, Martin Kemp and Robert B. Simon. 416 pp. incl. 16 col. + 93 b. & w. ills. (Oxford University Press, 2019), £36.99. ISBN 978-0-19-881383-5. DOI 10.1093/oso/97801988183835.001.0001.

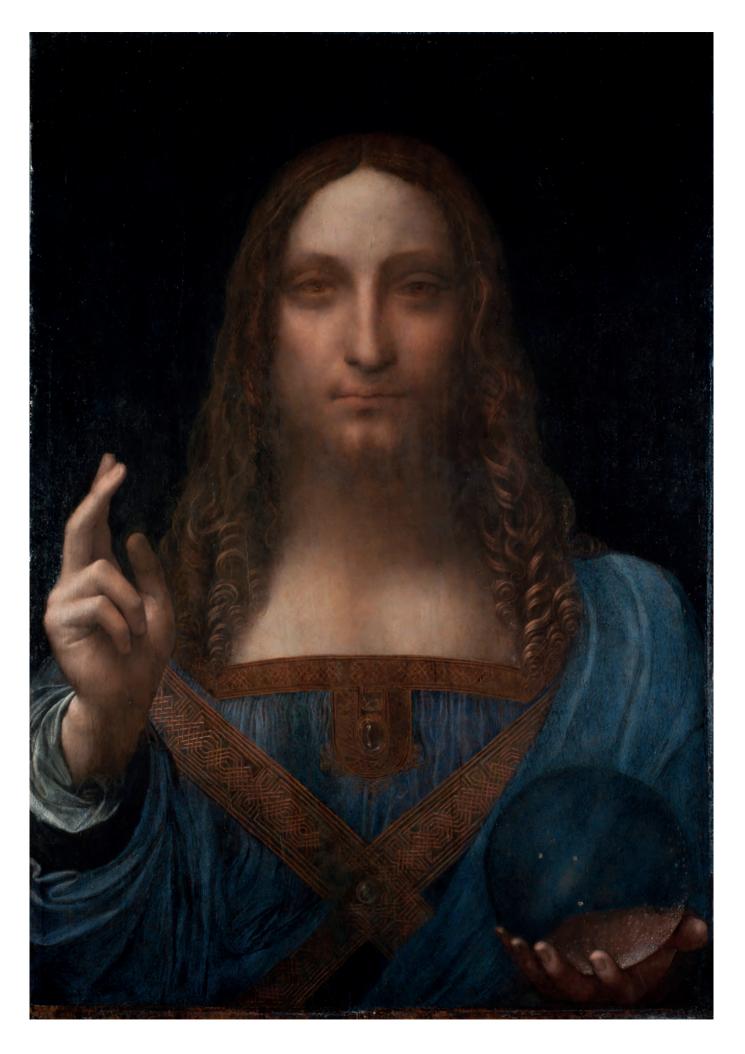
2 F. Zöllner: 'Leonardo da Vinci's "Salvator Mundi", its pictorial tradition and its context as a devotional image', Artibus et Historiae 42 (May 2021), pp.1-32, with an extensive visual archive including images of Veronica holding the sudarium.

1. Christ Pantocrator carrying the Gospel of John, central apse mosaic in Cefalù Cathedral. Completed before 1170. (© NPL - DeA Picture Library; photograph A. De Gregorio; Bridgeman Images).

Opposite

2. Christ as Salvator Mundi (Cook/Saudi version), attributed to Leonardo da Vinci, photographed in its restored state, 5th October 2017. After 1507. Oil on walnut panel, 65.5 by 45.1-45.6 cm. (Collection Kingdom of Saudi Arabia; courtesy Salvator Mundi LLC).







3. Study of drapery for a *Salvator Mundi*, by Leonardo da Vinci. c.1504–08. Red chalk with touches of white chalk and pen on pale red prepared paper, 22 by 13.9 cm. (Royal Collection / Royal Collection Trust; © Her Majesty Queen Elizabeth II, 2021; Bridgeman Images).

Italy (Fig.1).³ The crossed fingers (which the artist spent considerable time perfecting) imitate the letters of the Greek Christogram ICXC for 'Jesus Christ'.⁴ Early Christians modified certain hand gestures that Romans had adopted from Classical Antiquity. The gesture of blessing made by Christ, forming the shapes of his initials ICXC, also conveys doctrinal

3 M. Baghos: 'Christ Pantokrator in the Byzantine Art of Italy', Phronemα 34, no.1 (2019), pp.55-84.
4 See www.trinityiconographers.org, accessed 2nd November 2021.
According to H.P. L'Orange, this gesture of speech was still prevalent in the sixth century, as implied in certain verses by P. Silentiarius (PG, 86, 2149); see H.P. L'Orange: Studies on the lconography of Cosmic Kingship in the Ancient World, Oslo 1953, p.182. See further, with visual examples, M. Chatzidakis: 'An encaustic icon of Christ at Sinai', transl. Gerry Walters, The Art Bulletin 49, no.3 (September 1967), pp.197-208, citing L'Orange at

p.201, note 14, where the author argues that by the sixth century the iconography of Christ the Pantocrator was transferred to portable icons and coins associated with the writings of the iconodules that developed later. Royal Library, Windsor Castle, RCIN 912524 and 912525. This argument was first put forward by L. Heydenreich: 'Leonardo's "Salvator Mundi", Raccolta Vinciana 20 (1964), pp.83-109; see now C.C. Bambach: Leonardo da Vinci Rediscovered, New Haven and London 2019, II, pp.282-87. 6 The second state of the etching is engraved on the plate, 'Leonardus da Vinci pinxit: Wenceslaus Hollar fecit

truths: I and X represent the Trinity and bringing thumb and ring finger together to form the C symbolises the Incarnation, the union of the divine and human natures in the person of Christ. This gesture derives from Classical oratory, where it means that the speaker is going to say something important. The present reviewer does not wish to suggest that Leonardo intentionally incorporated such complex theological references, but he could have seen the speaking/teaching/blessing gesture in portable Byzantine icons or Early Christian or ancient mosaics.

The gesture is in keeping with the painting's theme of offering the Ptolemaic universe for consideration in the form of a crystalline sphere, rather than the holy gospels of the Greek iconography or an orb and sceptre, traditional symbols of power in northern European versions of the subject since the time of Charlemagne. The complete effacement of all brushstrokes (even under stereomicroscopic examination), in fact of all signs that the image was made by human hands, attests to the way that exquisite skill of hand combined with theoretically informed understanding of optical phenomena and anatomy served religious ends. The result is an uncanny sense of lifelikeness, as if the pictured Christ made of paint and wood had transformed into a corporeal presence empowered with speech – what Martin Kemp in the book under review refers to as the 'visual magic' (p.91) is powerful despite the damaged condition of the painting.

Twenty-seven old painted copies of this design have been identified at last count. Is this one Leonardo's original, as the authors claim? The question is not easy to answer: the painting is undocumented during the artist's lifetime, which is not in itself unusual for a private devotional image. A few autograph sketches of details and two exquisite large drawings of Christ's vestments in red chalk on red prepared paper, one considered autograph (Fig.3), the other perhaps partly a student's work corrected by Leonardo (Fig.4), support the hypothesis that the artist designed such a painting. Existence of a finished painting seems to be confirmed by an etching signed by Wenceslaus Hollar dated 1650, which states in Latin that it was made directly from Leonardo's original painting (Fig.5).

However, as published the book differs from the publication that was planned at the time of the public unveiling of the restored *Salvator Mundi* at the exhibition *Leonardo da Vinci: Painter at the Court of Milan* at the National Gallery, London, in 2011–12, when its curator, Luke Syson, attributed the panel solely to Leonardo da Vinci. The anticipated volume, which would have included more essays and more visual documentation, was scheduled by Yale University Press but, regrettably, the press cancelled the contract. This scaled-back publication by Oxford University Press does not include the promised detailed visual record of the painting's conservation treatment and scientific analysis nor are the images of sufficient quality and quantity to support fully the authors' discussions.

Fortunately, visual evidence of the analysis and treatment of the painting can be consulted in a report published in 2014, when a photograph of the painting in its stripped-down state was first made public (Fig. 6),

Acqua forti, secundum Originale, A 1650' ('Leonardo da Vinci painted it; Wenceslaus Hollar made this etching, after the original, in the year 1650'). 7 L. Syson et al.: exh. cat. Leonardo da Vinci: Painter at the Court of Milan, London (National Gallery) 2011-12. 8 Martin Kemp, cited in M. Dalev: 'The disappeared "Salvator Mundi's" endgame: Part I: altered states and a disappeared book', Artwatch UK online, 12th and 24th August 2020, artwatch.org.uk/the-disappearedsalvator-mundis-endgame-part-ialtered-states-and-a-disappearedbook/, accessed 2nd November 2021. 9 See D.D. Modestini: 'The "Salvator

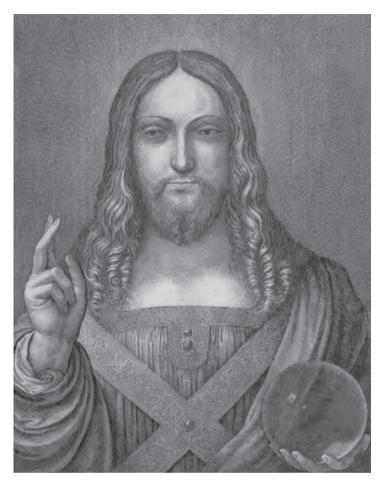
Mundi" by Leonardo da Vinci rediscovered: history, technique and condition' in M. Menu, ed. Leonardo da Vinci's Technical Practice: Paintings, Drawings, and Influence / La Pratique technique de Léonard de Vinci, Paris 2014, pp.130-51; and idem: 'Salvator Mundi revisited'. salvatormundirevisited.com, accessed 2nd November 2021 10 Sale, Christie's, New York, Post-war and Contemporary Art, 15th November 2017, lot 9 B. 11 See M. Cole: 'The Leonardo anniversary: a retrospective' THE BURLINGTON MAGAZINE 162 (2020), pp.512-19.

and on the excellent website created by Dianne Dwyer Modestini, the Director of the Kress Program in Paintings Conservation at the Institute of Fine Arts, New York University, which supervises the care of Kress paintings nationally and has trained generations of conservators to treat

4. Studies of draperies for a *Salvator Mundi*, by Leonardo da Vinci and workshop. c.1504–08. Red chalk with pen and ink and white heightening on pale red prepared paper, 16.4 by 15.8 cm. (Royal Collection / Royal Collection Trust; © Her Majesty Queen Elizabeth II, 2021; Bridgeman Images).

them.⁹ Modestini worked on the panel from 2005 until 2011 and varnished it in 2017, when the fully restored painting fetched the unprecedented sum of \$450 million at auction.¹⁰ The painting was reportedly purchased by a Saudi prince, now widely acknowledged to be acting on behalf of Crown Prince Mohammed bin Salman, and promptly disappeared. It was absent from its anticipated display at the Louvre Abu Dhabi and from the 2019 exhibition at the Musée du Louvre, Paris, commemorating the fivehundredth anniversary of Leonardo's death.¹¹ The Louvre subsequently





5. Christ as Salvator Mundi, by Wenceslaus Hollar after Leonardo da Vinci. 1650. Etching, 25.5 by 17.9. cm. (Royal Collection / Royal Collection Trust; © Her Majesty Queen Elizabeth II, 2021; Bridgeman Images).

withdrew a forty-five-page report of a technical examination conducted in 2018 by C2RMF (Centre for Research and Restorations of the Museums of France) with the most advanced technology available, prepared for the occasion. The retracted book was reported to support the full attribution to Leonardo while documenting how the composition evolved over time – notably, the arm with the blessing hand is painted over the initial layer of the black background.¹² The book was withdrawn because the painting was not loaned for exhibition as anticipated. Modestini, who saw a copy, feels the conclusions confirm her own, earlier, judgements, and they 'do not reveal anything I did not already know about the materials and techniques'.¹³ The report has still not been released. The Salvator Mundi is now believed to reside in a freeport storage facility in Switzerland.¹⁴

More recently, the attribution and whereabouts of the painting have been the subject of a sensationalising documentary film, *The Savior for Sale: The Story of Salvator Mundi*, written and directed by Antoine Vitkine, produced by Zadig-Productions and France Télévisions, released on 13th April 2021, on France 5. Following the release of this film, copies of the 2018 Louvre technical report were selectively leaked to some scholars and reporters. In June 2021 another documentary, *The Lost Leonardo*, directed

12 See A. Cole: 'How the Louvre concealed its secret Salvator Mundi book', *The Art Newspaper* (31st March 2020), although this had been reported previously, by Sotheby's in January

2015. See Sotheby's document from 28th January 2015, cited in B. Lewis: The Last Leonardo: The Secret Lives of the World's Most Expensive Painting, London 2019, pp.229 and 616, no.12. See

by Andreas Koefoed with interviews by the key players, premiered at the Tribeca Film Festival, New York.

How did this sensational discovery and the world's most expensive painting end up in storage? To say that the artistic identity and conservation treatment of the Salvator Mundi have been the subject of major controversy is an understatement. If only the contentious tone of the discourse could return to the model of cooperation between scientists and historians articulated at the Cultural Heritage Advanced Research Infrastructures: Synergy for a Multidisciplinary Approach to Conservation/Restoration (CHARISMA) conference held at the National Gallery, London, in January 2012, 'Leonardo da Vinci's Technical Practice: Paintings, Drawings and Influence'. The present review is offered in the hope that the historical issues regarding Leonardo's artistic practice could be the basis of such an effort. This belatedly published book tries to set the record straight. It is co-written by three art historians intimately involved in the authentication process: Robert B. Simon, the New York dealer and art historian who discovered the painting in a regional auction catalogue in 2005; Martin Kemp, the leading Leonardo authority who has championed the panel as a fully autograph work since he first saw it in 2008; and Margaret Dalivalle, Kemp's former student and the provenance specialist who researched the painting's history in the broader context of seventeenth-century British interest in Leonardo. 16 Each has written a separate section to which the other two authors have contributed, taking 'shared responsibility for the book as a whole' (p.v).

Where did this painting originate? According to Dalivalle, whose research is fully published here for the first time, the earliest record of the painting is in the 'Contractor's Inventory' of the Commonwealth sale of 8th November 1649, held to pay off the Crown's creditors after the execution of Charles I nine months earlier. Dalivalle argues that Hollar saw the painting in London after his return from Antwerp in 1649 if not earlier (p.242). The challenge presented by this inventory is that two separate paintings of the subject are attributed to Leonardo, laconically described as a 'peece of Christ' from the Queen's residence at Greenwich and a 'lord's figure. in halfe' from St James's Palace (p.188).

Either way, the inventory securely establishes that a portrait of Christ (Salvator Mundi is its modern title) belonged to Charles I, the foremost art collector of his time in England. Both paintings were sold in 1651, one to Captain John Stone (after nearly being sold to Cardinal Mazarin in 1650), which was returned to the Crown at the restoration of the monarchy in 1660. The other painting was acquired by Major Edward Bass and disappeared from the archival record, although Dalivalle convincingly identifies Bass's '[Our] lord's figure' with a painting in the Pushkin State Museum of Fine Arts, Moscow, attributed to a follower of Leonardo, since it has the Royal Collection's 'CR' [Carolus Rex] mark branded on the verso. Dalivalle was also able to recover the provenance of the Stone painting thanks to a fortuitous survival of documentary evidence about its whereabouts from 1649 until c.1666 (p.267). Stone's painting then disappears from the archival record until 1763, when it can reasonably be identified with an item in the catalogue for the sale of contents from Buckingham House, London (p.278). From there the painting cannot be traced until the end of the nineteenth century, when it entered the important private collection of Francis Cook (1817–1901) attributed to a Leonardo school artist, Bernardino Luini. The process of its rediscovery is told by Simon. Cook's grandson, the art historian Herbert Cook, published the painting in his collection

also A. Cole: 'Disarming new findings on Leonardo's Salvator Mundi', *The Art Newspaper* (26th January 2021). 13 Cited in M. Landrus: 'Salvator Mundi: Why Bernardino Luini should be

back in the frame', *The Art Newspaper* (3rd September 2018).

14 Matthew Landrus, cited in
Lewis, *op. cit.* (note 12), p.529.

15 Conference held 13th-14th January



6. Christ as Salvator Mundi (Cook/Saudi version), attributed to Leonardo da Vinci, photographed in its cleaned state, 2005. After 1507. Oil on walnut panel, 65.5 by 45.1–45.6 cm. (Collection Kingdom of Saudi Arabia; courtesy Salvator Mundi LLC).

7. The Cook/Saudi Salvator Mundi, photographed by William Edward Gray when in the Cook Collection, before 1913. (Witt Library, London).

catalogue in 1913 (without a photograph) as a free copy after Giovanni Antonio Boltraffio, a prominent member of Leonardo's studio in the 1490s. The painting therefore entered the twentieth century as a copy of a copy of a lost Leonardo.¹⁷

In 1958 Sotheby's sold the panel in London with the Boltraffio attribution for a pittance (£45) to Warren and Minnie Kuntz, a couple from New Orleans on holiday. Simon and his associate Alexander Parish bought it at auction in April 2005 for \$1,175 from the estate of Minnie Kuntz's heirs as 'after Leonardo da Vinci'. Simon identified a photograph of it made prior to 1913 when the painting was still heavily repainted (Fig.7). The delicate moustache, slightly askew, bears a striking resemblance (in this reviewer's opinion) to seventeenth-century French fashion, for example the engraved portrait of Sublet de Noyers in the frontispiece to Roland

2012, organised jointly with the Centre de Recherche et de Restauration des Musées de France and the British Museum, London. See M. Menu *op. cit.* (note 9). 16 Dalivalle's provenance research was briefly noted in Syson *op. cit*. (note 7), no.91 and p.302; L. Gouzer and C. Wetmore, eds: *Leonardo da Vinci: Salvator Mundi*, New York 2017,



Fréart de Chambray's *Parallèle de l'architecture* (1650) (Fig.8), or the portrait of Leon Battista Alberti in the first printed edition of Leonardo's *Trattato della Pittura* (1651).

Dalivalle argues on formal grounds that Hollar's etching is closer than any other known copy to the ex-Cook collection painting, except for the beard. Given that Hollar does not reveal the painting's owner or location, she suggests that the beard might have been added to the print because a beardless Christ could have been seen as unorthodox during widespread religious wars in Europe. Kemp suggests that a 'very fine and sparse beard' (pp.96–97) might have existed before the surface was abraded, but none has been detected.

Questions remain regarding how the painting entered the Royal Collection. Dalivalle's nuanced account emphasises the uncertainties of provenance research. Her text is a model of methodology, documenting her thought process and articulating the multiple possibilities awaiting further investigation. All three authors struggle to explain the existence of an undocumented *Salvator Mundi* in Leonardo's body of work, in which many factors remain in flux including the dating of drawings and paintings that he worked on for many years. Kemp's most valuable observations,

pp.53-54; and in Modestini, op. cit. (note 9), pp.141-42.

17 See T. Borenius: A Catalogue of the Paintings at Doughty House Richmond and Fleewhere in the

Collection of Sir Frederick Cook BT, ed. Herbert Cook, London 1913, 1, p.123. Borenius described it as a copy after Boltraffio and Cook added the additional caveat. alongside his account of the history of the subject and 'transitive' viewing practices (p.119, noting the term is John Shearman's), concern the changes recorded on the panel that have been recovered through non-invasive imaging technology. These include Kemp's close analysis of the knotwork embroidery 'rendered in a fully plastic manner' in the band visible near Christ's right hand, as opposed to the more routine execution in the central plaque and horizontal band, which 'might suggest some studio intervention' (pp.93 and 99), as do the gathered rivulets of drapery below the band.

Infrared reflectography (IRR) confirms delicate pentimenti throughout the surface: in the upper margins of the diagonal bands of Christ's stole, the fingertips of Christ's left hand, the intentionally double image of the heel of that hand visible through the celestial sphere and above all in the thumb of Christ's raised hand, which is 'full of understated anatomical conviction' (p.97). Kemp describes how the joints of the fingers swell and diminish, how the fingers and thumb of the right hand catch the light that glances across them from the upper left, including the subtle characterisation of light and shadow under the little finger, where the artist pressed his hand into the drying paint. Kemp writes insightfully about Leonardo's efforts to create a 'depth-of-field' effect (p.282), designed to bring the raised right hand forward against the softer modelling of the head, and the understated anatomical veracity, two qualities that his studio assistants never matched (Fig.9). The general effect of the IRR is of 'a fresh and spontaneous execution within the parameters of a design that was largely resolved in advance' (p.94). Although it became a flashpoint for some critics of the painting, Kemp's discussion of the crystalline sphere as picturing a Ptolemaic universe (Fig.10), complete with sparkling inclusions that catch the light in various ways in an area that has not suffered from abrasions like the rest of the surface, is another highlight of the book.

Weighing up the evidence of the drawings, the nature of the knot pattern, the optical qualities of the sphere and the style and expression of the painting as a whole, the evidence points to the Cook/Saudi *Salvator Mundi* as Leonardo's original, a chance discovery made at a point when his authorship was hidden under extensive inpainting that masked the painting's horrible condition. The argument is convincing because it shows that many changes made during the execution of the painting can be explained as belonging to the artist's continuous process of inventing directly on the panel to integrate the composition. As with other autograph Leonardo paintings, beginning with those made in his first stay in Milan, the modelling of volume and the definition of the edges of forms merge with their surroundings, in this case total darkness.

Leonardo also recorded his evolving concerns in his writings, including dated intact notebooks that establish a relative chronology covering thirty years of his career, a documented chronology that remains an underutilised resource for dating his paintings. Kemp dates the inception of the painting to 1503 or slightly later, on the basis partly of drawings that others date differently. The proposed placement in Leonardo's body of work hinges in part on the interpretation of two important documents involving ownership of paintings by or after Leonardo by his assistant Salaì (Gian Giacomo Caprotti da Oreno; 1480–1524). The first documents

18 See C. Farago: Leonardo da Vinci's 'Paragone': A Critical Interpretation with a New Edition of the Text in the Codex Urbinas. Leiden and Cologne 1992; and idem: 'Non finito: Leonardo's Saint Anne and its written legacy', in A. Nova and P. Galluzzi, eds: Decoding Leonardo's Codices (Conference proceedings Kunsthistorisches Institut and Museo Galileo, Florence, 10th–12th October 2019), Venice 2022, pp.109–28.

19 See B. Jestaz: 'François 1er, Salai, et les tableaux de Léonard', Revue de l'art 126 (1999), pp.68-72; and E. Villata: Leonardo da Vinci. I documenti e le testimonianze contemporanee, Milan 1999, n.347. The following analysis of the two documents is accepted by F. Zöllner in idem and J. Nathan: Leonardo da Vinci, 1452-1519: The Complete Paintings and Drawings, Cologne 2011, I, p.244, and preface to the revised edition of 2018.



8. Detail from *Portrait of Sublet de Noyers*, frontispiece to Roland Fréart de Chambray: *Parallèle de l'architecture antique avec la modern*, Paris 1650. Engraving by George Tournier after Charles Errard. (Getty Research Institute, Los Angeles; courtesy Getty Open Content Program).

money paid to Salaì in Milan in 1518 for unspecified pictures sold for a high sum to Francis I.19 According to the majority of scholars, since the king lavished honours and favours on Leonardo in the final period of his life, when he lived five hundred yards from the royal residence in Amboise, he would have been considered the legitimate legatee of the paintings in Leonardo's possession at his death that were not mentioned in his will. This documentation is complicated by the existence of a probate inventory of property owned by Salai, dated 21st April 1525, which lists high values for five paintings, implying they were for originals by Leonardo, as argued by Simon, Kemp and Dalivalle with caveats (pp.138–39 and 309, no.8, and p.333, no.2).20 However, in this case, the amounts are unreliable because they were recorded by a clerk and were inflated for the benefit of Salai's dishonest sisters. Given the generic, shorthand nature of many inventories, 'un Cristo in modo de uno Dio Padre' (a Christ as God the Father) in the 1525 probate inventory is likely to be the painting of a frontal Christ signed and dated by Salaì in 1511, which is in the Pinacoteca Ambrosiana, Milan.21

This interpretation of the documents corroborates a dating of the *Salvator Mundi* to the late period of Leonardo's activities and reinforces Dalivalle's proposals for a French provenance. The appearance of the painting in its stripped state suggests that it was not completed during Leonardo's first Milanese period (1482–99), as proposed by Syson, and perhaps not conceived during his second Florentine period either (1500–06/07), as proposed by Kemp, but developed later, in Milan (1507–13),

I, pp.6–13; V. Delieuvin in idem, ed.: exh. cat. Saint Anne: Leonardo da Vinci's Ultimate Masterpiece, Paris (Musée du Louvre) 2012, p.205, note 66; Bambach, op. cit. (note 5), I, p.270, II, p.444, III, p.518, and IV, p.305, note 32. Dalivalle, in the book under review, pp.136–37, reserves her opinion and also cites Kemp's proposal that Salai might have been an art dealer on the side, see M. Kemp and G. Pallanti: Mona Lisa: The People and the

Painting, Oxford 2017.

20 J. Shell and G. Sironi: 'Salai and Leonardo's Legacy', THE BURLINGTON MAGAZINE 133 (1993), pp.95-108.

21 Inv. no.2686.

22 See C. Farago: 'Leonardo on reading pictures: the "Paragone" in the workshop', in Johannes Gebhardt and Frank Zöllner, eds: Leonardo's Paragone in Context (International Conference on Leonardo da Vinci, University of Leipzia, 18th-21st July

when the French king Louis XII became Leonardo's patron, and/or Rome (1513–16), where Leonardo's patron was Giuliano di Lorenzo de' Medici (1479–1516), brother of Pope Leo X. If the painting had travelled with Leonardo and his assistants to Amboise (1516–19), together with the Mona Lisa (Portrait of Lisa Gherardini), Virgin and Child with St Anne, the Louvre St John the Baptist and other paintings, it would have entered the king's collection immediately after Leonardo's death. Why did it not enter the Musée du Louvre with those paintings? Did it remain in Rome? Or Milan?

The complex painting technique and colouristic chiaroscuro are in keeping with Leonardo's late style and theoretical interests. As Frank Zöllner, Pietro Marani and several other leading Leonardo specialists have argued, the sfumato technique corresponds more closely to his late works than to the period around 1500 proposed by Syson. Leonardo created subtle sfumato transitions in the final blending of light and shade through superimposing numerous fine, translucent layers, a technique he developed over many years. In the 1490s he achieved infinitely subtle gradations of modelled flesh by extraordinarily simple means. In the London Virgin of the Rocks and other Milanese works of this period, the deep tones were established in the initial underpainting. Despite the complexity of the interwoven passages of light and dark paint, the areas of flesh in these paintings consist of just two basic layers, opaque leaded paint, composed largely of white pigment with small amounts of colour, laid over the monochromatic understructure of the composition. Leonardo's portraits from the 1490s show that his technique became progressively more refined, culminating in Cecilia Gallerani with an ermine (National Museum, Kraków), where complex layers of scumbling define the subtle sfumato shading of the form on top of the two-layer structure, in the manner of manuscript illumination.²² Outlines begin to dissolve as objects no longer rely on the sharp-edged definition of contours: the emphasis shifts to concerns with atmosphere and locating the figure in a three-dimensional space.²³ The complexity of Leonardo's technique continued to evolve until his latest paintings, corresponding closely to his written concerns with modelling, contour, atmosphere and other forms of nonlinear perspective.24 The interrelationship between his writings on painting and his studio technique recovered through non-invasive imaging technology offers an excellent resource for establishing the chronology of his artistic production. The raised hand in the Salvator Mundi, an area that survives intact without abrasion, consists of at least four or five layers of coloured glazes in the highlights and two or three in the shadows, suggesting a work from the late period.25 Most writers have extolled the effect of the blessing hand but Zöllner has questioned the attribution to Leonardo due to the 'pale' flesh tones.²⁶ In the epilogue of the book under review Kemp responds to each of Zöllner's reservations concluding that in '[a]vailing ourselves of all the art historical resources, our view in this book is that any studio intervention was limited at most to repetitively routine details, such as portions of the knotwork on the decorative bands of Christ's tunic' (pp.282-83).

Simon describes the journey of discovery, beginning with his initial purchase and research to determine the history of the painting. His mounting excitement as the painting's cleaning and treatment unfolded is compelling. The repainting visible in the pre-1913 photograph had

2019), Petersberg 2021, pp.42-61.
23 Zöllner and Nathan, op. cit. (note 19), 1, p.99.
24 See Farago, op. cit. (note 18) and (note 22).
25 As confirmed by Modestini in emails to the author (17th July and 20th July 2021), noting that 'it is not possible to describe the number of layers of glazes and scumbles he used with precision'. As also noted

on her website, the Cook/Saudi panel

is unusual among paintings attributed to Leonardo in that it has no drying cracks.

26 Zöllner and Nathan, op. cit. (note 19), p.444. Beginning with the 2017 edition of his monograph, Zöllner has attributed the painting to 'Leonardo da Vinci and his Workshop, after 1507'.

27 N. Gutman Rieppi et al.: "Salvator Mundi": an investigation of the painting's materials and techniques', Heritage Science (20th April 2020),



9. Detail of Fig.2, showing Christ's right hand.

been removed prior to the 2005 sale, but Modestini's removal of further overpainting, assistance with pigment and media analysis by her associate Nica Rieppi, and removal of marouflaging and the early nineteenth-century cradling of the support by her associate Monica Griesbach, revealed both the high quality of the original work and the ruinous condition of the panel.²⁷

As Modestini cleaned the highly damaged proper right side of Christ's face, 'brilliant passages of delicacy and complexity emerged, including the haunting expression of power and solemnity' (p.15). The vertical crack down the centre of the panel fortunately skirts the centre of the face but split the panel into two large pieces and five small fragments when the additional supports were removed by Griesbach under Modestini's supervision. In some places the gesso fill of the vertical crack (now believed to have started due to the veering of the grain in the walnut panel) was more than five centimetres wide where it filled the 'valley' between two bowed sections of panel, covering original paint that emerged when the gesso was removed.²⁸ The painted surface had been planed down to the bare wood in some places. Modestini concluded that the planing was a misguided effort to bring the two halves of the bowed walnut panel on either side of the check into alignment, but the brutality of this damage has even suggested to others that it might have been an act of iconoclasm.²⁹ More likely, the

available at doi.org/10.1186/s40494-020-00382-3, accessed 3rd November 2021. Modestini's website also publishes Rieppi's findings and states that a full report is yet to be published.

28 In an email to the author (20th July 2021), Modestini notes that the Louvre scientists concluded that the crack was due to veering of the grain, based on an X-radiograph showing that the plank was taken from the centre of the tree trunk,

which corrects her earlier assessment

that the crack was due to an unstable knothole in a plank taken from the periphery. She adds that the Louvre team did not use the more sophisticated technique of optical coherence tomography and their assessment awaits confirmation by the wood scientist Lorenzo Riparbelli, who examined the X-radiograph some years ago and first noted the inferior quality of the wood.

29 Lewis, op. cit. (note 12), pp.161–62.

planing of the surface occurred after the marouflaging and cradling, which can cause further instability due to changes in humidity.³⁰ The painting is in a ruinous condition but, as Kemp described it in an interview, at least eighty per cent of the surface was original, including parts where only the intermediate layers survive.³¹ At first Simon's team considered doing an archaeological reconstruction but they decided to restore the integrity of the painting after taking additional infrared photographs that revealed the extent of *pentimenti*, including the repositioning of Christ's hands and his stole. In July 2007 Modestini completed a plan of selective retouching: additional use of non-invasive imaging technology showed the *pentimenti* with greater clarity, revealing the probable use of a partial cartoon for the design of Christ's head. The painting was examined by other invited scholars when the inpainting was minimal: the glazes on the orb were not yet replaced, the eyes were unresolved and the *pentimenti* were left visible.

Debate continues to swirl around this painting, driven by the press. The story that Simon tells can be checked against the photographs and descriptions of the analysis and restoration on Modestini's website. In hindsight, if they had known at the beginning that it was by Leonardo, they would have done more photographic documentation and formed a committee, but at the beginning it was just the two of them.³² One problem that has been raised in response to the available evidence concerns the changing appearance of the blue folds of Christ's tunic over his left shoulder after the painting was exhibited in 2011. Simon explains that the saturation of paint can partially, but only temporarily, restore the earlier appearance of the area affected by degradation of the ultramarine (lazurite). A dark fissure ran from Christ's nose down through the centre of his mouth, the right of which appeared bruised and swollen. It was difficult to see how it had originally been painted. Conservators routinely use comparative evidence. Modestini consulted a book of scientific photographs of the Mona Lisa, published by the Louvre, which contains greatly enlarged, high-resolution details of the painting (of the kind that would have been valuable in the book under review).33 In trying to understand how to fix the 'little damage to the mouth', Modestini suddenly realised that this Salvator Mundi was by Leonardo, because 'nobody but Leonardo painted that way. The final glaze - pigment mixed with an oil binder - in the area around the mouth was like smoke. It was so thin that you couldn't see the brushstrokes. It was like it was blown on or breathed on'.34

Whether scholars accept the attribution solely to Leonardo or not, most specialists now regard the Cook/Saudi *Salvator Mundi* as a work of very high quality designed by Leonardo, who was also involved in its execution. In all likelihood, this is the first new Leonardo to be added to his painted corpus since the rediscovery in 1909 of the *Benois Madonna*

Mottin, eds: Au coeur de la Joconde: Léonard de Vinci décodé, Paris 2006, which has been translated into English and German.

34 Modestini cited in Lewis, op. cit. (note 12), p.224, citing Milton Esterow, 'Rediscovering a Leonardo: How experts around the world concluded that Salvator Mundi was a lost work

2011, p.101.
35 See M. Kemp and T. Wells:
Leonardo da Vinci's Madonna of
the Yarnwinder: A Historical and
Scientific Story, London 2011; and
T. Wells: 'The Madonna of the
Yarnwinder: conservation history
and the painting's influence', in Menu,

by the master', Artnews, September

33 See J.-P. Mohen, M. Menu and B.

36 See B. Mottin: 'Leonardo's Monα Lisa in the light of its Madrid Copy', in Menu, op. cit. (note 9), pp.203–22.
37 Delieuvin, op. cit. (note 19).

op. cit. (note 9), pp.101-11.

(State Hermitage Museum, St Petersburg). Although it is unlikely that the Cook/Saudi panel, a private devotional image, was planned and executed by more than one artist, it might have been left unfinished and it might have served as a model for variants executed by students or associates. One of the most exciting challenges in Leonardo studies now is to understand how he organised his labour force and utilised assistants while also teaching students and developing pedagogical notes for his book on painting, unrealised in his lifetime but compiled by Francesco Melzi from his teacher's unpublished papers. From recent studies of Leonardo's studio practices, it has emerged that he developed variants of his designs executed by his studio while the autograph original was under way. Kemp was the first to recommend that the best versions of the Madonna of the Yarnwinder be regarded as 'variants' of Leonardo's design rather than copies of a non-existent original.³⁵ Kemp argued then that our modern, market-driven preference for 'originals' attributed to a single artist imposes anachronistic and over-simplified understandings on complex historical objects.

The scientific analysis of the Salvator Mundi can help us locate the painting in the body of Leonardo's work, which is the stated purpose of this book. Leonardo's process of invention was hardly ever straightforward. Sorting out the copies is essential to this process. As Kemp explains, certain details in the knotwork and drapery suggest participation by Leonardo's assistants. The evidence is complicated by the fact that Leonardo frequently made revisions to his paintings over a long period of time, as attested by one to which the authors compare the Salvator Mundi, the Mona Lisa, documented in progress in 1503, which he retained until his death in 1519, when it was still unfinished. Recently, cleaning and analysis of a copy of the Mona Lisa in the Museo Nacional del Prado, Madrid, has revealed that it was executed in the presence of Leonardo's fully autograph original when it was in progress.³⁶ The same situation has been documented regarding two actual-size copies of the St Anne.37 The unfinished panel of St Jerome, traditionally dated to Leonardo's first Florentine period, which has been recently proposed as an early work of his first Milanese period (1483–99), is another case in point because, as Martin Clayton has documented, Leonardo made adjustments to the anatomy of the figure's neck dating from the period around 1510 when he undertook dissections with the north Italian professor of anatomy Marcantonio della Torre.³⁸

Of the more than twenty copies of the *Salvatore Mundi* that have been identified since Ludwig Heydenreich's initial study of 1964, many surfacing in the wake of Simon's and Parish's spectacular discovery, only two appear to be contemporary with this painting, as the present reviewer first learned from evidence posted on Modestini's website.

38 See M. Clayton: 'Leonardo's anatomical studies and his artistic practice, and proposals for the St. Jerome', in P.C. Marani and R. Maffeis, eds: Leonardo da Vinci: Metodi e tecniche per la costruzione della conoscenza (Atti del Convegno, Politecnico di Milano, 13–14 maggio 2015), Busto Arsizio 2015, pp.177–84.
39 Unpublished analysis shared with the present reviewer, 13th November 2021, cited by Modestini, 'Salvator Mundi revisited', op. cit. (note 9), at note 42.

40 See J. Snow-Smith: *The Salvator Mundi of Leonardo da Vinci*, Washington 1982.

41 On the Naples copy, see Modestini, op. cit. (note 9), presenting visual overlays of several elements formulated before Leonardo adjusted the final composition, corroborated by a technical analysis partially published on the website (conducted by emmebi

Diagnostica Artistica, May 2019). She attributes the painting to Leonardo's Milanese studio assistants. Marco d'Oggiono/Boltraffio (personal communication with the author, 23rd July 2021): F. Zöllner: 'Il "Salvator Mundi" di Leonardo: La tradizione iconografica, le diverse versioni e una domanda: è forse un dipinto 'romano"?', in R. Antonelli, C. Cieri Via. A. Forcellino and M. Forcellino. eds: exh. cat. Leonardo a Roma: Influenze ed eredità, Rome (Villa Farnesina) 2019, pp.251-53, attributes the painting to the Sicilian painter Girolamo Alibrandi who worked in Leonardo's Milanese studio: and C. Pasquali: 'Il restauro del "Salvator Mundi" del Museo di San Domenico di Napoli', in Forcellino and Forcellino, pp.425-34, also associates the technique with an artist in Leonardo's studio 42 Bambach, op. cit. (note 5), III, p.287.

(note 12), p.220. Modestini's 98-yearold husband, Mario, a highly respected restorer with a special interest in Leonardo, was also present. See Simon in the book under review, pp.13–15.

30 My thanks to Margaret Dalivalle

for this suggestion, email to the

31 See 'Martin Kemp, Behind the

scenes of Leonardo da Vinci's \$450

Sotheby's documents online, p.241,

channel=Auctionpodcast, accessed

would say about 80 per cent of the

or lower layers. In some places the

top layers have not survived. So it is

32 Modestini cited in Lewis, op. cit.

quite complicated'

15th November 2021. Kemp states, 'I

panel is covered in paint that Leonardo

put on. Some of that is underpainting

Million Salvator Mundi'. YouTube. 10th

available at https://www.youtube.com/

author (25th November 2020).

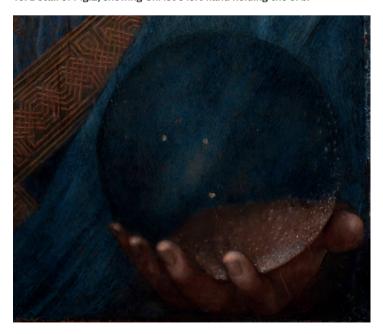
December 2017, transcribed in

watch?v=hMsg7kWge6A&ab_

Among the previously most promising candidates, the copy in Warsaw formerly attributed to Cesare da Sesto is painted on an oak panel felled in the Seine basin, c.1586 (dendrology study, 2005).39 The panel in Detroit sometimes previously attributed to Giampietrino is painted on Baltic oak harvested after c.1569. So neither of these is contemporary with Leonardo and his students or other close associates. However, the copy formerly in the De Ganay collection, currently in a private collection and needing further study, once claimed as Leonardo's original,40 and the copy in the museum of S. Domenico Maggiore, Naples, painted on a single plank of walnut with a check that runs vertically along its entire length according to a technical study of 2019, are excellent candidates to be considered as copies executed by assistants while the autograph original was available. 41 Distinct spolvero marks and a schematic underdrawing in the ex-De Ganay panel indicate that the design was transferred without pentimenti from a full cartoon, and is therefore not the original; the IRR of the Naples copy reveals the use of several partial cartoons. The design of the drapery in these copies is closer to Leonardo's red chalk drawings than is the Cook/Saudi painting. Carmen Bambach, who attributes the Cook/Saudi panel to Boltraffio on this basis, has identified the red chalk drawing on red prepared paper of the sleeve as the student's work corrected by Leonardo (right side of Fig.4).s42

Given the thinly painted eye region (and the uneven level of the eyes, noticed by several critics), there is to this reviewer's mind also the question of whether the Cook/Saudi panel was finished during Leonardo's lifetime. Matthew Landrus has collected evidence that Bernardino Luini was capable of achieving similar effects in *sfumato* and owned many Leonardo drawings, as reported by Gian Paolo Lomazzo.⁴³ Luini operated his own studio in Milan from 1508 and he was in contact with Leonardo. A collector of Leonardo drawings, he owned the cartoon of the *Virgin and Child with St Anne* (National Gallery, London), on which he based his *Holy Family with St Anne and St John* (Pinacoteca Ambrosiana, Milan).⁴⁴ Could he have acquired the Cook/Saudi panel and finished the painting? After Melzi returned to Milan, he collaborated with Girolamo Figino: could they have participated?⁴⁵ The authors of the book under review dismiss the possibility that a mature associate of Leonardo's was involved.

10. Detail of Fig.2, showing Christ's left hand holding the orb.



These and other aspects pertaining to the scientific analysis of the panel remain open questions. Controversies initially arose from the analysis and restoration of the Cook/Saudi Salvator Mundi by private individuals with excellent reputations but limited access to expensive technology. They turned to other experts when their examinations revealed the possibility that they had stumbled upon Leonardo's original. Some scholars may never condone the decision of the painting's owners to restore the painting to the point that its terrible condition is invisible, yet a similar decision was reached regarding the restoration of *The Last Supper*: so much was missing that it was impossible to appreciate the painting as a visual statement.46 Given that Leonardo paintings are also cultural icons appreciated by a broad public and that a high-resolution photographic record of the scientific study and conservation process is publicly available (or would be if the crucial technical analysis conducted by the Louvre were published), this reviewer understands the rationale. As for the criticism levelled against all parties involved in the decision to include the painting in Syson's 2011 exhibition at the National Gallery, this reviewer agrees with those who say it was an unparalleled opportunity to consider the painting in the presence of many autograph works and many works by Leonardo's students and associates. Simon and his co-owners exposed themselves to risk: what might have been their folly became the occasion for extensive public exchange during the exhibition among scholars who brought different expertise and different priorities and values to the table.

Consideration of all sides of the question has, after all, been the very definition of academic discourse since Cicero (who took his cues from Plato).⁴⁷ At this point, the ball is not really in the Saudis' court anyway, as most pundits propose, because what appears on the surface of the painting today is a reconstruction of what it looked like before it was heavily damaged. It would be helpful if the Saudi/Cook Salvator Mundi were available for study, but what matters as far as the visual evidence is concerned are the many forms of non-invasive imaging technology and material analysis that have taken place since the painting was rediscovered in 2005. Modestini's website is no longer adequate, as she herself explains on the site. Rieppi's publication of the pigment analysis is also exceptionally valuable, but most important of all are the technical examinations made for the Louvre in 2018 by C2RMF.48 This is not some kind of zero-sum game, nor will the 'facts' disappear just because they are suppressed. Right now, it is access to the scientific analysis of the painting - rather than the Saudi Crown Prince or the President of France, as one of the recent sensationalising documentaries would have it - that appears to be standing in the way of an open discussion involving qualified historians and scientists.

43 See Landrus, op. cit. (note 13); and G.P. Lomazzo: Trattato dell'arte della pittura, scoltura et architettura, Milan 1584.

44 Bambach, op. cit. (note 5), I, p.33; III, pp.36–38, 336 and 538; and IV, pp.54–55, note 264. In Landrus, op. cit. (note 13), it is noted that, according to Lomazzo, Luini and one of his sons acquired fifty red chalk drawings by Leonardo.

45 A suggestion made by D. Seybold:

'A Salvator Mundi puzzle or: a "Last Leonardo" in some sense', Microstory of Art, 4th May 2021, www.seybold.ch/ Dietrich/ASalvatorMundiPuzzle, accessed 3rd November 2021. 46 See P. Brambilla Barcilon and P.C. Marani: Leonαrdo: L'Ultimα Cena, Milan 1999; and D.A. Brown: exh. cat. Leonardo's Last Supper:

The Restoration, Washington (National Gallery of Art) 1983.
47 See Cicero: Academica: On

Academic Skepticism, transl. Charles Brittain, Indianapolis 2006. **48** Rieppi *et αl.*, *op. cit* (note 27). On the film, see D.D. Kirkpatrick and E. Sciolino: 'A clash of wills keeps a Leonardo masterpiece hidden'. New York Times (11th April 2021), citing numerous inaccuracies. They also cite Sophie Grange, a Louvre spokeswoman, stating that museum officials would be forbidden to discuss any such document due to French rules prohibiting the evaluation or authentication of works not shown in the museum; and they report that, according to the French art lawyer Corine Hershkovitch these 'long-held traditions' had been 'formalized by law in 2013, in a decree establishing the status of heritage conservators' The former 'rule' does not seen insurmountable and the applicability of the 2013 law has not been otherwise discussed to this reviewer's knowledge