

NATIONAL GALLERY CATALOGUES
THE ITALIAN PAINTINGS
BEFORE 1400



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Dillian Gordon

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For Simon, Alice and Olivia

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Director's Foreword

The earliest catalogues of the National Gallery's collection took the form of pocket-sized guides that were in many ways equivalent to the wall labels which have been in use for the last fifty years or so. The first of these pocket catalogues were published in 1832, by William Young Ottley, who can claim to be Britain's first true art historian, and in 1834, by John Landseer, an engraver and the uncle of the great animal painter Sir Edwin Landseer. They include astute critical observations which were not considered appropriate in the official publications that followed. These were compiled chiefly by Ralph Wornum, who was the Keeper when Sir Charles Eastlake was Director (the earliest editions had been commissioned from him by Eastlake when he was himself Keeper). The Gallery's third Director, Frederic Burton, altered the format of these official publications to include fuller biographies of all the artists. Larger volumes, illustrated with engravings, were published in the 1830s and towards the close of the century luxury folios with photogravures and photographs were also available. In the 1920s it was possible to purchase small volumes illustrating all the paintings in the collection.

During the Second World War, when the paintings were evacuated to north Wales, the curators applied themselves to revising and extending the catalogues. The most notable author of these works, which began to appear soon after the war, was Martin Davies. Although his style could be cryptic in its concision, his relentless pursuit of accuracy, which inevitably entailed elaborate arguments and extensive notes, set a new standard of excellence. These revised and longer catalogues were now devoted to the separate 'schools', that is, to the major regional divisions of European art (previously only British and Italian paintings had been accorded separate treatment). They were still portable, but they were scholarly reference works, more often consulted in conjunction with separate volumes of illustrations than used by visitors in the Gallery itself.

No achievement of the National Gallery in the twentieth century has been better received or more internationally influential than these catalogues. The work – like so much great scholarship – was undertaken for its own sake and not in response to demand. Neither the Director nor the Trustees had given it special encouragement, although they came to acknowledge its importance. Scholarship had long been considered desirable in the director and the curatorial staff, but only when these catalogues were published could the National Gallery be considered as a centre of art-historical scholarship.

The catalogues which the National Gallery publishes today are similar in size to the luxurious black and white illustrated volumes produced during the nineteenth century, but they are now illustrated in colour and make use of detailed comparative

and scientific photographs. They include significant contributions from the Scientific and Conservation Departments. And the curators who write them are influenced by art-historical considerations (especially of the meaning, purpose and original placement of the works of art) that were of little concern to Davies. They also incorporate some of the tradition of connoisseurship which is so strongly felt in the great catalogues of the Department of Prints and Drawings in the British Museum that began to appear at the same time as those by Davies. There is something fitting in this development, since Eastlake, the National Gallery's first Director, was not only a great connoisseur but an exceptional investigator of the way in which the techniques of European painting had evolved.

Eastlake was responsible for the acquisition of many of the paintings catalogued here, and his own contributions to scholarship and connoisseurship were made largely in the field of early Italian painting, with which indeed the names of his great successors in this field, notably Cavalcaselle, Morelli, Berenson and Longhi, are also associated. It was the area of the collection which presented the problems that Davies most liked to solve – or at least to identify. Dillian Gordon has been inspired where others might have been inhibited by his meticulous and scrupulous example. Indeed, Dr Gordon is the author of more scholarly catalogues than anyone, other than Davies himself, who has ever worked here. She retired from the National Gallery in 2010 and was appointed OBE for her services to early Italian painting in 2011. Her achievement is recognised by her colleagues not only in this institution but in art institutions in Europe and the United States.

The publication of the National Gallery's catalogues has been made possible by several charitable individuals and institutions but, for more than a decade now, our principal debt has been to the generosity of Arturo and Holly Melosi, through the Arthur and Holly Magill Foundation. Without their support, these catalogues would have to be more costly and thus much less widely available. The Directors and the Trustees cherish the scholarly character of the Curatorial, Conservation and Scientific Departments. The catalogues provide a focus for their work and influence all else that is produced for our visitors – on labels, in guidebooks and leaflets, and, increasingly in the future, on our website.

Nicholas Penny
DIRECTOR



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The information presented in a catalogue grows out of a constant accumulation of facts gathered from many different sources. I am deeply indebted to the contributions and help of numerous people, several of whom have commented on individual entries. They include: Denise Allen, Susanna Avery-Quash, Alessandro Bagnoli, Luciano Bellosi, Roberto Bellucci, Nicole Bériou, Michael Black, Bonnie Blackburn, Miklós Boskovits, Maria Grazia Branchetti, Xavier Bray, Beverly Brown, Mariagiulia Burrese, Monika Butzek, Antonino Caleca, Caroline Campbell, Lorne Campbell, Lorenzo Carletti, Maurizio Carniasciali, Mercedes Ceron, Keith Christiansen, Donal Cooper, Alan Crookham, David d'Avray, Andrea De Marchi, Thomas De Wesselow, Simona Di Nepi, Caroline Elam, Gabriele Fattorini, Eduardo Fernandes, Daniele Ferrara, Ulrike Fischer, Holly Flora, Burton Fredericksen, Cecilia Frosinini, Robert Gibbs, Sergio Guarino, Margaret Haines, Charlotte Hale, Marcia Hall, John Henderson, Paul Hills, Adrian Hoch, Frederick Ilchman, Machtelt Israëls, Dominique Jacquot, Rossella Lari, Michèle Lavallée, Donata Levi, Wolfgang Loseries, Alison Luchs, Roberto Lunardi, Rhona MacBeth, Giovanni Paolo Maggioni, Giorgia Mancini, Matteo Mazzalupi, Antonio Mazzotta, Martin McLaughlin, Chiara Merucci, Esther Moench, Lisa Monnas, Elisabetta Nardinocchi, Britta New, Daniela Parenti, Linda Pisani, Ben Quash, John Martin Robinson, Francis Russell, Jan Schmidt, Victor Schmidt, Frithjof Schwartz, David Scrase, Erling Skaug, Jennifer Sliwka, Gail Solberg, Cornelia Syre, Angelo Tartuferi, Dominique Thiébaud, Johannes Tripps, Evelyn Welch, Stefan Weppelmann, Timothy Wilson, and Robert Woosnam-Savage.

Laurence Kanter has always been generous in sharing ideas, especially on the painters working in Santa Maria degli Angeli. I owe a particular debt to Joanna Cannon for her friendship and for her expertise and comments, above all on the entries for Sienese paintings. Christa and Julian Gardner have throughout unstintingly offered professional help and neighbourly support.

I have benefited from the help of librarians and the use of several libraries outside the National Gallery: in Florence the Archivio di Stato, the Kunsthistorisches Institut and the Uffizi; in Pisa the Archivio di Stato; in Oxford the Bodleian Library, the Sackler Library, the Taylorian Library, Blackfriars College, St John's College, Worcester College, Corpus Christi College; in London the Warburg Institute, the Courtauld Institute, the British Library and the National Portrait Gallery.

This book has been expertly project managed by Jan Green and sensitively designed by Gillian Greenwood; it has been meticulously edited by Diana Davies and typeset by the eagle-eyed Helen Robertson. Giulia Ariete and Suzanne Bosman tracked down the often elusive illustrations. Jane Hyne and Penny Le Tissier ensured the quality of the reproductions.

I am grateful to Elena Greer for so efficiently tackling the difficult entry for the Dalmatian/Venetian painting (NG 4250) with its complex problems of attribution and iconography.

National Gallery curators are especially fortunate in their regular collaboration with the Scientific and Conservation Departments. Much of the technical information on the works included here was first acquired by an interdisciplinary team, of which I was the curatorial member, for the *Art in the Making* exhibition *Italian Painting before 1400* in 1989. The majority of the pictures discussed here were examined then for their pigments and layer structure by Ashok Roy, and organic analyses were carried out by Raymond White. Technical interpretation of the paintings was undertaken by the exhibition team of which David Bomford and Jill Dunkerton were key members, while Jo Kirby provided research on the early technical literature. For this present catalogue, Marika Spring and Rachel Billinge have reviewed and updated the earlier technical information and have contributed substantially to its re-compilation. They have provided some new analyses, revised interpretations and corrections as well as fresh technical discoveries. I am particularly grateful to Rachel Billinge, with whom I have examined every painting featured in this catalogue, bar two. Her keen eye and exemplary thoroughness have greatly contributed to the sheer pleasure of examining such beautiful paintings through the lenses of a powerful stereomicroscope. It may be a convention to say that any mistakes are my own but it bears repeating.

Particular thanks are due to Carl Strehlke, who read every entry and from whose comments, advice, support and friendship I have benefited over the years. I have likewise benefited from the comments made by Luke Syson. His support and advice as colleague and friend have contributed immeasurably to the pleasure of working at the National Gallery and I am delighted that he has taken over the curatorship of the early Italian paintings that are so dear to me.

Several of the paintings featured here were acquired under the directorship of Neil MacGregor, whose infectious enthusiasm made being a curator at the National Gallery so rewarding. The current director, Nicholas Penny, has given constant encouragement towards the publication of this catalogue, concomitant with his policy of underpinning curatorship with scholarship.

I should also like to thank the Arthur and Holly Magill Foundation, without whose generous sponsorship the publication of this catalogue would never have been possible.

Dillian Gordon

Map of Central Italy



Map of Northern and Central Italy and Dalmatia





Introduction

The Collection¹

The National Gallery has one of the finest collections of early Italian paintings outside Italy. Most of the major painters from Florence, Siena, Rimini, Bologna, Venice and Milan active between 1250 and 1400 are represented. The named painters include Cimabue, Giotto, Duccio, Ugolino di Nerio, and the Cioni brothers Jacopo and Nardo, all working in Tuscany, and Lorenzo Veneziano working in Venice, as well as a number of major but anonymous painters such as the Master of the Clarisse, the Master of the Borgo Crucifix (Master of the Franciscan Crucifixes) and the Master of Saint Francis. It is noticeable that paintings from Tuscany predominate, although a painting by Simone Martini is still lacking, and Sienese painting of the second half of the fourteenth century is represented only by the small signed painting by Niccolò di Buonaccorso (NG 1109).

The formation of the collection of early Italian paintings has largely depended on the taste of English nineteenth-century collectors, many of whom travelled widely in Italy, buying directly from churches.² Notable examples were William Young Ottley (1771–1836), Sir Austen Henry Layard (1817–1894)³ and Charles Fairfax-Murray (c.1849–1919).⁴ The purchase of a number of paintings from the Lombardi-Baldi Collection under Sir Charles Eastlake, Director of the National Gallery, in 1857, reflected his exceptional interest in early pictures and the widespread if controversial belief that a national collection should represent the full story of the evolution of Western painting rather than a group of exemplary masterpieces, and added substantially to the representation of early Italian works in the Gallery.⁵

The first catalogue of the early Italian collection to give extended information beyond the basic facts of dimensions, attribution and provenance was that of Martin Davies in 1951, which he revised in 1961. His scrupulous scholarship set the standard for cataloguers all over the world. In 1988 the present author undertook a revision of his 1961 catalogue. Since then the contribution of numerous scholars in the field has added considerably to our knowledge of the early paintings in the collection, as is evident in the individual entries. Furthermore, advances in technology have made possible a more detailed investigation of construction, underdrawing, medium and pigments. This introduction is intended to provide a brief overview of some of the new information which has emerged since 1988, especially as a result of technical investigation.

Acquisitions

Since 1988 a number of major acquisitions have enriched the National Gallery's collection, particularly for the thirteenth century, which was hitherto sparsely represented. These acquisitions have been especially important given that the

thirteenth-century, probably Pisan, *Virgin and Child* (NG 4741) was stolen in 1970.

In 1998 the National Gallery acquired the *Virgin and Child* (NG 6571) by the Master of the Clarisse (Rinaldo da Siena?). The importance of this painter's work to the development of thirteenth-century Sienese painting has been clarified by the remarkable discovery of the frescoes in the lower level of Siena Cathedral dating from the 1260s, including the *Crucifixion* and *Deposition* by him, frescoes which had a profound influence not only on Duccio but also on other painters, for example the Master of Saint Francis.⁶

Joanna Cannon's recognition in 1998 that the thirteenth-century *Man of Sorrows* (NG 6573), then in the Stoclet Collection, Brussels, is the other wing of the *Virgin and Child* (NG 6572), then in a private collection, made it possible after their purchase by the Gallery in 1999 to reunite the panels as a diptych; this is not only the earliest surviving diptych with this iconography, but also an early example of the penetration of Byzantine influence on Italian painters during the second half of the thirteenth century. The *Man of Sorrows* had previously been thought to be Venetian. However, its association with the *Virgin and Child* clearly demonstrated it to be Umbro-Pisan: it is here attributed to the Master of the Borgo Crucifix (Master of the Franciscan Crucifixes), a pupil and/or collaborator of Giunta Pisano. Cleaning of the diptych in 2008 revealed the three-tone cross behind the figure of Christ in the *Man of Sorrows* and consequent links with Crusader art. It also showed that dirt in the tooling was disguising the fact that the painter was using either the same or a very similar punch to that used by the Master of Saint Francis, who almost certainly trained and/or worked with him and in whose work links with Crusader art have also been detected.

One of the most significant acquisitions, made in 2000, was the small *Maestà* (NG 6583) by Cimabue, a painter known hitherto only through monumental works, such as the versions of the *Maestà* for San Francesco, Pisa, and for Santa Trinita, Florence. The discovery of this work finally settled the question of the authorship of the *Flagellation* in the Frick Collection, New York, which had been the subject of controversy, with conflicting attributions to Duccio and to Cimabue, and which Luciano Bellosi had recently attributed to Cimabue on the basis of comparison with the *Maestà* from Pisa.

With the acquisition of the *Coronation of the Virgin* (NG 6599) from the Kisters Collection in 2004, the Gallery was at last able to represent Bernardo Daddi, and to show him at his best. Whether the painting is part of a polyptych or an independent panel remains to be determined. Its acquisition has added to the representation in the Gallery of that quintessentially Florentine image of the Coronation, from Daddi, through Jacopo di Cione's San Pier Maggiore altarpiece of

1370–1 (NG 569–78), Agnolo Gaddi's version (NG 568) painted in the 1380s for an unknown location, to Lorenzo Monaco's altar piece of 1407–9 for San Benedetto fuori della Porta Pinti.⁷

Altarpieces and their Companion Panels

Several companions to the panels catalogued here have newly been identified, with implications for our overall knowledge of the original work.⁸

Giuliana Algeri has associated a painting of the *Nativity with the Virgin adoring the Child* (Milan, Brera) by Barnaba da Modena with the *Pentecost* (NG 1437), suggesting that they come from the same altarpiece and that more scenes are missing from the Infancy of Christ. The association with the *Ascension* in the Pinacoteca Capitolina, Rome, was already known. A possible link with a *Virgin and Child*, signed and dated 1377, from San Francesco, Alba, is more tentative, and indeed the precise location of the narrative panels in the altarpiece, and the type of altarpiece it was, are still unclear.

As well as the *Blessing Redeemer* (Munich, Alte Pinakothek) which went above Niccolò di Pietro Gerini's *Baptism* (NG 579.1–5), one may now add the pinnacles with the *Annunciating Angel* and the *Annunciate Virgin* (Richard Feigen Collection), originally placed on either side, although, as pointed out by Laurence Kanter, the altarpiece is still missing two side panels, presumably with standing saints, and a central predella panel. At the time of writing (2010) the altarpiece is undergoing conservation treatment, which has involved the uncovering of an early (very fragmentary) inscription. Before it was covered up in the nineteenth century, the inscription had been recorded, leading Werner Cohn in 1956 to identify the altarpiece as having come from the Stoldi family chapel in the Camaldolese monastery of Santa Maria degli Angeli, Florence. George Bent's admirable study of the monastery has made it possible to assess the altarpiece in the context of the patronage and design of other altarpieces commissioned for family chapels there, although it needs to be emphasised that these were not burial chapels.⁹

One of the most problematic altarpieces is that from the Albizzi family chapel dedicated to Ognissanti in Santa Maria degli Angeli, of which the *Noli me tangere* (NG 3894) may have been one of the pinnacles. This panel had previously been associated with the *Crucifixion* artificially framed with *Six Angels* (New York, Metropolitan Museum, Lehman Collection), and a *Man of Sorrows* (Denver Museum of Art). In 1994 and 1997 Gaudenz Freuler linked documents of 1365 concerning the Albizzi chapel to the reconstructed altarpiece. Both the reconstruction and the authorship remain problematic, but the connection with the chapel endowed with the inheritance from Francesco di ser Berto degli Albizzi seems likely in view of the discovery of twelve pilaster panels which almost certainly formed part of the altarpiece. The figures on these pilaster panels include four Camaldolites, two of whom are probably identifiable as Beata Paola and Beato Silvestro, who both had specific links with Santa Maria degli Angeli. In 1997 Amy Huntington associated these pilaster panels with the *Six Angels* in the Lehman Collection; she suggested that the central panel

could have been the *Virgin and Child* attributed to Jacopo di Cione in the Museum of Fine Arts in Budapest.¹⁰

Attribution of the *Noli me tangere*, the *Crucifixion* and the *Man of Sorrows* had largely revolved around Jacopo and Andrea di Cione (also known as Orcagna) until 1972, when Miklós Boskovits reconstructed them with two panels of *Kneeling Saints* (Rome, Collection of Emilio Greco, and Luxembourg, Musée d'Histoire et d'Art) by Don Silvestro dei Gherarducci. In 1999 Pia Palladino removed the Rome and Luxembourg panels from the reconstructed altarpiece on grounds of attribution and added the *Six Angels*, suggesting that the commission was initially awarded to Nardo di Cione. The attribution is complicated by the collaboration between the three Cioni brothers, and by the death of Nardo in 1366 and of Andrea in 1368, which left Jacopo to complete the probably unfinished work. Although the commission may initially have been awarded to Nardo, his distinctive style of underdrawing, which is found in *Saint John the Baptist*, *Saint John the Evangelist* (?) and *Saint James* (NG 581), is absent from NG 3894 and the accompanying pilaster panels. However, infrared reflectography reveals that the underdrawing of the pilaster panels is similar to that of the *Noli me tangere*, which in turn has characteristics in common with the underdrawing of some parts of the San Pier Maggiore altarpiece (NG 569–78), as well as with the *Crucifixion* (NG 1468). It is generally accepted that Jacopo di Cione was the painter in overall charge of the San Pier Maggiore altarpiece, and likewise the *Crucifixion* is accepted as having been painted by Jacopo with the help of a collaborator. Further investigation with infrared reflectography of the other panels might clarify the attributional problems which beset this altarpiece. In the meantime the *Noli me tangere* is here attributed to Jacopo di Cione.

Using existing altarpieces as prototypes for reconstructions of fragments or for speculating on what companion panels might be missing can be misleading, as has been shown in connection with the *Vision of the Blessed Clare of Rimini* (NG 6503), here attributed to Francesco da Rimini. This painting, which belongs with the *Adoration of the Magi* (Miami, Coral Gables), was part of an altarpiece that had previously been reconstructed with a now lost *Crucifixion* in the centre on the basis of an altarpiece in the Musée Fesch, Ajaccio, which shows almost identical panels of the *Adoration of the Magi* and the *Vision of the Blessed Clare of Rimini* on either side of the *Crucifixion*. However, eighteenth-century descriptions have been discovered which show that the central panel, now missing, was in fact the *Virgin and Child* with two angels and Mary Magdalene. Also linked with the altarpiece are two pinnacle panels – the *Annunciating Angel* in a private collection, and, less certainly, a *Crucifixion* in the Musée des Beaux-Arts, Strasbourg.

Technical Investigation

Many of the paintings discussed here were included in the 1989 exhibition *Art in the Making: Italian Painting before 1400*. The catalogue for that exhibition remains a standard reference work for the technique of early Italian panel painting which persisted until the late fifteenth century.¹¹ The processes and

techniques involved in making the paintings are discussed in detail in the catalogue introduction, and are illustrated by the reconstructions by Jill Dunkerton that were carried out for the exhibition, with reference to Cennino Cennini's *Libro dell'Arte*. Images of each stage are reproduced again here (figs 1–6). In basic terms, the early Italian paintings in the National Gallery all conform to a similar technique: the medium is egg tempera, the support is generally poplar. A number of studies have also been made of paintings that have either been acquired or have undergone conservation treatment since the *Art in the Making* exhibition; these too form the basis of the technical information in the entries in the present catalogue.

Every painting catalogued here, except Segna di Buonaventura's large *Crucifix* (NG 567), Spinello Aretino's fresco (NG 1216.1) and Jacopo di Cione's *Crucifixion* (NG 1468), has been re-examined in the conservation studios. The paintings have been remeasured and careful study has been made of the structure of the support, supplemented by X-radiography and infrared reflectography. For a significant number of the paintings, samples and results from earlier campaigns of analysis were available, either from the research carried out for the exhibition *Art in the Making* in 1989, from work on subsequent acquisitions, or from analysis carried out in support of conservation treatments. In addition, existing samples were re-examined to bring the results up to date using optical microscopy, energy dispersive X-ray analysis in the scanning electron microscope (SEM-EDX) and Fourier transform infrared (FTIR) microscopy. The surface of the paintings was examined under a stereomicroscope wherever possible at magnifications of up to 40× to extend our knowledge of the materials and techniques, to identify pigments and pigment mixtures in areas that were not sampled, and to correlate the observations from samples with the appearance of the painting itself. A limited number of new samples were taken to address specific questions that arose during the research for the catalogue. In some cases it has been possible to take our knowledge of the paintings a little further, building on and adding to the descriptions in the *Art in the Making* exhibition catalogue. The punches used to decorate burnished water gilding on the paintings have all been recorded and described in each individual entry. Erling Skaug's invaluable two volumes on the subject, published in 1994, are still essential and provide a context for the punch marks on the National Gallery paintings.

The X-radiographs for the paintings catalogued here have all been re-examined, and new ones made where necessary, with the result that earlier assumptions have sometimes been overturned. For example, in Barnaba da Modena's painting of the *Coronation of the Virgin, Trinity, Virgin and Child with Donors, Crucifixion and Twelve Apostles* (NG 2927), signed by the artist in 1374, the panel is made up of two boards with a vertical grain, with a central vertical join. It was recognised during the examination that the join was secured with four original dowels, indicating that the panel was always one piece and not the two wings of a diptych later joined together as had been thought in the past. The X-radiograph also reveals the remains of two hinges on the right-hand side, but nothing

on the left-hand side, suggesting that this was the left wing of a diptych or possibly a triptych.

The X-radiographs of Ugolino di Nerio's Santa Croce polptych have been used in the past to inform the reconstruction of the altarpiece (see above). Further examination has revealed that in each of the upper tier panels in the National Gallery (NG 3377 and NG 3473) there is a dowel hole finishing at a join in the panel; the holes seem to have been bored into the wood before the main tier panels were made wider; this may have been a mistake made by the carpenter.

Joanna Cannon has identified the Dominican cardinal Niccolò da Prato as the likely patron of the triptych with the *Virgin and Child* by Duccio (NG 566), and Victor Schmidt has shown that its twin triptych with the *Crucifixion* in the Museum of Fine Art, Boston, was probably also commissioned by him. X-radiographs reveal decoration of a different design beneath that which is now visible on the exterior of the wings of both triptychs. Comparison of the painting of the imitation marble on the exterior with that of the steps on which the saints are depicted on the interior of the wings shows that the technique is very different. This, together with other observations detailed further in the catalogue entry, indicates that the exteriors of the wings have been repainted, perhaps in connection with a change of ownership, presumably after the cardinal's death in 1321 but before the two triptychs were separated.

The survey using infrared reflectography of all the paintings in the catalogue – with the exception of Segna di Buonaventura's *Crucifix* (NG 567) and some of the frescoes – has provided a much clearer picture of the range and extent of underdrawing which can be found in Italian paintings of the period. New reflectograms, made using digital technology, are much clearer and easier to read than those from earlier examinations, which has resulted in some reassessments of earlier interpretations.

For example, new reflectograms have been made of all the paintings by Duccio in the National Gallery (NG 1139, 1140, 1330 and 566). The underdrawing was described in the *Art in the Making* catalogue as 'clearly showing the double line of a quill',¹² but after new reflectograms were made it could be seen that this apparent splitting of the line is actually the result of pigment concentrating along the outer edges of the stroke (a result of the forces of surface tension as the liquid dries). This also happens with a line made using a brush; indeed, elsewhere in the paintings are lines of surface paint which show the same split appearance in the infrared reflectogram but were certainly applied using a brush. It is still true that the underdrawing in these pictures was applied in several stages, but the tool used is more likely to have been a brush than a quill pen.

The full reflectogram of *The Healing of the Man born Blind* (NG 1140) has also revealed faint and sometimes rather blurred freehand underdrawing for the buildings. This underdrawing was probably done by Duccio, whose strengths did not lie in his grasp of architecture, and the design was probably refined by a second painter, in this instance thought to be Simone Martini by comparison with the narrative scenes in



Fig. 1 The application of a gesso ground: anti-clockwise from top left, the wood and frame; linen fabric; *gesso grosso*; *gesso sottile*; dusting its surface with charcoal; smooth gesso ready for gilding and painting. In the spandrel is some *pastiglia*.



Fig. 2 The underdrawing: the figure has first been sketched with charcoal and some of the drawing has been fixed with dilute ink applied with a brush.



Fig. 3 The application of the gilding: the divisions between those areas to be gilded and those to be painted have been incised. On the left, bole has been applied to the gesso in the areas to be gilded; on the right, gold leaf has been adhered to the bole, but not yet burnished.

ABOVE Figs 1–6 The stages in the construction of a panel painting, using the techniques described by Cennino Cennini in *Il Libro dell'Arte* (*The Craftsman's Handbook*) and based on an angel in Agnolo Gaddi's *Coronation of the Virgin* (NG 568), courtesy of Jill Dunkerton.

Simone's Beato Agostino Novello altarpiece, now in Siena Pinacoteca. Simone was probably responsible for the more precise and mathematically designed features of the architecture: he made some changes to the incised composition and neaten straight edges by ruling into the wet paint or by reinforcing them with metalpoint when the paint was dry. The faint blurred appearance of some of the first drawing may be the result of attempts to delete the lines where they did not form part of the revised architecture.

Most of the underdrawing found in the paintings in this catalogue was executed in a liquid material containing black pigment and shows up well in infrared images; however, in some paintings no underdrawing could be detected – perhaps because none was used by the artist, or, more likely, because the underdrawing was done in a material not made visible by infrared reflectography. In some paintings underdrawing that can clearly be seen with the naked eye where the paint has become more translucent with age is not visible in infrared reflectograms. This is the case with, for example, certain of the pinnacle panels of the San Pier Maggiore altarpiece (NG 573–8). The underdrawing looks like a dark liquid line, not obviously different from the drawing used elsewhere on the altarpiece, which does register in infrared reflectography.

There were no cross-sections that included this underdrawing, so it has not been possible to make a positive identification through analysis, but it was probably done with iron-gall ink, which is transparent to infrared in the range used for reflectography, although it is dark brown or black in visible light.

The debate as to whether Niccolò di Pietro Gerini or Niccolò di Tommaso was involved in the design of the San Pier Maggiore altarpiece is revisited here. It is complicated by the fact that it is not certain what precisely 'disegnare' involved. However, infrared reflectography confirms that Niccolò di Pietro Gerini did not contribute to the underdrawing, since the type of underdrawing found in his *Baptism* (NG 579.1–5) is nowhere to be detected in the San Pier Maggiore altarpiece.

The underdrawing revealed by infrared reflectography can sometimes clarify the nature of collaboration between two painters. The panel with *Saints Catherine and Bartholomew* (NG 5930) was in 1988 attributed to Allegretto Nuzi on the basis of the punch marks which are commonly found in his work, while an attribution to Francescuccio Ghissi has been made by Fabio Marcelli (2004). The visible divergence between the accomplished underdrawing and the relatively crude painting seems to have been the result of the type of collaboration between the two painters first outlined by Federico Zeri (1975) in relation to a different altarpiece: Nuzi presumably designed the altarpiece but entrusted part of its execution to Ghissi, then a member of his workshop, probably soon after Nuzi had fled Florence during the Black Death of 1348.



Fig. 4 All the gilding has been burnished. The circles of the halo have been incised into the gold and the decoration is in the process of being punched. Silver leaf has been applied to the vase.



Fig. 5 The flesh has been underpainted with green earth. The draperies have been painted using pre-mixed shades of colour. The wings and floor covering have been painted over the gold in preparation for the technique of *sgraffito*.



Fig. 6 The completed reconstruction with the flesh tones modelled over the green earth. The pattern of the floor covering and the feathers have been scratched into the paint to reveal the gold beneath. The decoration of the borders of the cloak has been mordant gilded.

The nature of egg-tempera painting does not allow for changes to be made easily. Where they do occur they are generally confined to small modifications made at the painting stage. In Barnaba da Modena's *Pentecost* (NG 1437), for instance, the figure of the Virgin was painted narrower than she was drawn. Minimal adjustments during painting, for example in the position of a hand or foot and so on, are extremely common. An unusually radical change was made to the Virgin in Lorenzo Veneziano's *Madonna of Humility* (NG 3897): after the background had been water gilded and rays incised around the Virgin, her entire outline, except for her head, was reduced in size, so that extra gold had then to be added all around and in some places the rays extended. In addition, the position of her right hand was altered. She now supports the Christ Child behind his shoulder, but was first painted holding the baby lower down.

Some of the pigments available to painters during the thirteenth and fourteenth centuries are subject to degradation over time, which has had a significant effect on the appearance of many of the paintings. Common changes include the fading of red lake pigments and the darkening of paint containing blue or green pigments that are copper compounds, such as azurite, malachite and verdigris, due to reaction with the binding medium. In a significant number of paintings vermillion has degraded to dark grey, except where it has been protected by a red lake glaze or mixed with red lead; in several paintings this has led to only certain parts of the modelling

of a red drapery – usually the mid-tones – suffering from this deterioration. Paint containing ultramarine was occasionally observed to have become blancher and lighter than it would have been originally. Orpiment (arsenic sulphide) was found in only a few of the paintings examined, always in a degraded state with most of the pigment converted to translucent white arsenic oxide.

Some of the more dramatic changes that were observed during the examinations for this catalogue include those in Ugolino di Nerio's Santa Croce altarpiece, where the degradation of orpiment in the *Betrayal of Christ* (NG 1188) has left pale greyish ghosts of leaves and stalks. The darkening of azurite-containing paint has obscured the plethora of sea creatures in the scene of Saint Nicholas warning pilgrims against the devil in Margarito d'Arezzo's painting of the *Virgin and Child Enthroned, with Scenes of the Nativity and the Lives of Saints* (NG 564). One of the most disconcerting changes is caused by fading of the yellow component, probably a yellow lake, from a pigment mixture making green. In Andrea di Bonaiuto's small painting of the *Virgin and Child with Ten Saints* (NG 5115), the martyrs' palms, once green, are now blue, as are the formerly green leaves which have sprouted at the top of Joseph's staff in Niccolò di Buonaccorso's *Marriage of the Virgin* (NG 1109). In the scene of the *Marriage of the Virgin* in Giusto de' Menabuoi's *Coronation* triptych (NG 701) the blue wreath worn by the Virgin must surely have been green originally, while those leaves that are now brown seem to have

been painted with a copper-containing green pigment (probably verdigris) which has also deteriorated.

Metal leaf is used extensively on the paintings. Water gilding with gold leaf is generally on a reddish bole (with the exception of Giotto's *Pentecost* (NG 5360), where the gold leaf is laid on a green 'bole' consisting of green earth). Almost every painting also has some mordant gilding; there is more variation in the colour of the mordants, which has sometimes been revealed where gold leaf has been lost or abraded. The mordant used by the Master of the Palazzo Venezia Madonna (NG 4491 and 4492) is unpigmented, whereas Duccio (NG 1139, 1140 and 1330, and 566) used a thick yellow-brown mordant containing lead white, earth pigments, and small amounts of red lead and verdigris. Ugolino di Nerio also used a yellow-brown mordant. In the San Pier Maggiore altarpiece more than one type of mordant was used; for example, there is an unpigmented mordant with a milky whitish appearance in the *Nativity* (NG 573), while in the *Adoration of the Magi* (NG 574) two different batches of a brownish mordant have been used, one a brownish-red colour and the other a lighter brownish pink. Niccolò di Pietro Gerini used a distinctive salmon-pink mordant (NG 579.1). The use of a black mordant in the *Dead Christ and the Virgin* (NG 3895) by a Neapolitan follower of Giotto is unusual, although further research may reveal that it was used elsewhere.

Painters would have known that silver leaf would tarnish with time, yet they continued to use it where a white metal was depicted, for example in Saint Paul's sword in the altarpiece by Niccolò di Pietro Gerini (NG 579.1–5) and for the armour of the soldiers in Ugolino's predella panels for the Santa Croce altarpiece. A new finding in both the predella and other panels of this altarpiece was that for some of the mordant gilding 'oro di metà' (a metal leaf made by beating silver and gold leaf together, producing leaf which still had a golden colour but used less of the more precious metal) had been used. Other examples include the upper part of the soldiers' helmets in the *Resurrection* by Jacopo di Cione and his workshop (NG 575) and the mordant-gilded pattern on the Virgin's cloak in the *Virgin and Child* by the Master of the Clarisse (NG 6571).

In the *Crucifix* (NG 6361) by the Master of Saint Francis narrow strips of gilded tin were applied to the outlines of the cross. These strips have largely come away due to corrosion of the tin leaf; all that remains are tiny raised islands, on some of which some red lake paint can be seen, suggesting that the strips of gilded tin may have been patterned or were edged with red lake. The rays which emanate from the Holy Spirit represented by the dove in Giotto's *Pentecost* (NG 5360) were also gilded tin, although again only tiny greyish fragments remain, which were only discovered when examining the painting under a stereomicroscope. Gilded tin was probably more widely used in panel painting than has hitherto been realised, and was common in fresco painting. It was confirmed on the halo of the Evangelist in the Umbrian fresco (NG 4144), although only fragments remain, which now appear black since the tin leaf has degraded and very little of the gold leaf survives; and tin leaf, probably originally gilded, has been identified on fresco fragments by Spinello Aretino (NG 1216.2).

Authorship and Date

Comparatively few signed and/or dated panel paintings survive from this period. In this catalogue there are only four signed works.

The earliest is Margarito d'Arezzo's *Virgin and Child Enthroned, with Scenes of the Nativity and the Lives of Saints* (NG 564), which it is argued here must date from around 1263/4 on the basis of the derivation of the narrative scenes from the *Golden Legend*.

Giusto de' Menabuoi's signature on his *Coronation* triptych (NG 701) is unusual in being on the back and in stating that he painted it in Milan, while the date of 1367 is tooled into the gold leaf of the base.

Niccolò di Buonaccorso's signature on the *Marriage of the Virgin* (NG 1109) helps to confirm this as the central panel of the complex which included the *Presentation of the Virgin* (Florence, Uffizi) and the *Coronation of the Virgin* (New York, Metropolitan Museum, Lehman Collection). The possibility is raised here that this was a Florentine commission and thus partly responsible for the painter signing himself as 'de Senis' – from Siena.

The prominence of Lippo di Dalmasio's signature on the *Madonna of Humility* (NG 752), more customary on an altarpiece and less suitable for a processional banner, could suggest that NG 752 was indeed an altarpiece.

Fragments which come from signed altarpieces are the three predella panels (NG 1139, 1140, 1330) from Duccio's *Maestà*, completed in 1311 for Siena Cathedral; eleven panels from the Santa Croce altarpiece by Ugolino di Nerio, whose signature was first recorded by Vasari; and a panel (NG 1113) from Pietro Lorenzetti's *Birth of the Virgin* altarpiece of 1342 for Siena Cathedral.

Recently names have been attached to the oeuvre of a number of anonymous painters. Luciano Bellosi has identified the Master of the Clarisse as Rinaldo da Siena on the basis of a single small figure on a *Biccherna* panel. However, the question still remains as to whether one can convincingly extrapolate from one small figure. Regardless of whether he is Rinaldo or not, he was undoubtedly one of the leading painters in Siena during the 1260s, as the frescoes by him discovered in 2003 in the lower level of Siena Cathedral demonstrate.

Another example is the Master of the Blessed Clare, author of the *Vision of the Blessed Clare of Rimini* (NG 6503). Already in 1932 this panel had been attributed by Mario Salmi to a painter close to Francesco da Rimini. In 1993 Miklós Boskovits brought together a number of works suggesting that paintings by the Master of Verucchio, the Master of the Cini Madonna, and the Master of the Blessed Clare are in fact from different phases of Francesco da Rimini's career. In this catalogue it is suggested that the stylistic similarities between Francesco da Rimini and the Master of Verucchio may be the result of extremely close workshop collaboration, and that the latter may perhaps have been Francesco's brother, Zantardino.

Likewise the similarities between the Master of Albertini (Master of the Casole Fresco), who painted the *Virgin and Child with Six Angels* (NG 565), and the Master of Città di Castello may perhaps be explained by a (sibling?) partnership. The

suggestion first made by Miklós Boskovits that they are one and the same painter was pursued by Ada Labriola (1988) and Gaudenz Freuler (2001 and 2004) but, rightly, in the opinion of the present writer, questioned by Alessandro Bagnoli.

In 1968 the National Gallery acquired a small *Maestà* (NG 6386) as a work by Duccio. However, several writers subsequently cast doubt on that attribution, and in 1988 it was catalogued as by a follower of Duccio. In fact it would seem to be an early work by Ugolino di Nerio, probably while still working in Duccio's workshop: the attribution is borne out by a comparison of the underdrawing with that in the Santa Croce altarpiece, the only surviving signed work by Ugolino, while the palette with its subtle pigment mixtures is also characteristic of Ugolino.

Minor painters who imitated the work of other painters can be difficult to identify. Here it is suggested that the *Man of Sorrows* (NG 3893), previously catalogued as by an anonymous Venetian painter, is in fact by Jacobello del Bonomo, a Venetian who perpetuated the style of Lorenzo Veneziano, and that it was a pinnacle panel from a large polyptych, probably surmounting a central main tier panel showing the Virgin and Child enthroned.

NG 4741, which was stolen from the Gallery in 1970, was previously catalogued merely as Tuscan. Its Pisan provenance became evident after the *Cimabue a Pisa* exhibition in 2005, and in fact in 1989 Angelo Tartuferi identified the cross on the back as Pisan.

One catalogue entry has been written by Elena Greer, who has tackled the difficult problem of the *Altarpiece of the Virgin Mary* (NG 4250), catalogued by Martin Davies in 1951 and 1961 under Venetian school, and changed in 1988 to Dalmatian school. It is here classified as Dalmatian/Venetian School. She explores the various possibilities of authorship, particularly whether the altarpiece can be attributed to Meneghello, a Venetian painter who is copiously documented in Dalmatia but by whom no documented or signed works survive. She also discusses the complications of the iconography of the Madonna of the Immaculate Conception, relatively unusual at this date.

Comparatively few documents which elucidate paintings of the thirteenth and fourteenth centuries survive. The documents concerning Duccio were fully published in 2000 by Jane Immler Satkowski: they reveal something of the process of the commissioning of the *Maestà*, but no proper contract remains and we therefore have no knowledge of the exact starting date or the circumstances of the commission. Nor do we know for certain who was behind the commission, although it may be surmised that it was the Bishop of Siena, Ruggero da Casole, who was a Dominican and therefore a man of learning. Nor do we know the names of any of Duccio's collaborators who must have assisted him (despite the clause 'suis manibus' – 'by his hand'), and among whom must have been Ugolino di Nerio and Simone Martini.

Patrons and Patronage

The identity of the patron or patrons of many of the paintings in this catalogue is necessarily often hypothetical.

Examination under a microscope has confirmed that the male figure – presumably a donor – in Giotto's *Crucifixion* (Munich, Alte Pinakothek), which comes from the same altarpiece as the *Pentecost* (NG 5360), is tonsured. He was therefore a member of the secular clergy, but his relationship to the woman who kneels with him at the foot of the cross, and the church for which the altarpiece was painted, have not been resolved.

From its inscription we know that the triptych (NG 701) by Giusto de' Menabuoi was painted in Milan in 1367 (see above). This, together with the presence of Saint Ambrose, patron saint of the city of Milan, suggests a patron in Milan or its vicinity. The iconography of Saint Peter is unusual in that he is not simply holding the keys to Heaven but holding them out to Saint Catherine, and this combined with the presence of a number of female saints would seem to indicate a female patron, either called Catherine or devoted to that saint. A member of the ruling Visconti family cannot be excluded. Two further possibilities are suggested here. The first is that the triptych was commissioned by the Milanese Dominican nun Isotta de Terzago, who in 1363 commissioned from Giusto an altarpiece which included Saint Catherine. However, there is only one Dominican saint (Thomas Aquinas) depicted, and a perhaps more likely possibility is that it could have been commissioned by Ambrogio Birago for his wife Caterina: on 9 May 1363 they founded an oratory dedicated to Saint Ambrose and Saint Catherine, completed on 26 March 1367, whose fresco cycle includes, like NG 701, scenes dedicated to the lives of Saints Joachim and Anna and the early life of the Virgin.

The *Dead Christ and the Virgin* (NG 3895) was in 1928 recognised as belonging with the panel with *Saints John the Evangelist and Mary Magdalene* in the Lehman Collection, Metropolitan Museum, New York. Scholars have long had difficulty in placing the diptych, whose precise relationship with Giotto's workshop is hard to define. In 1988 it remained as Florentine school. Since then the consensus has been that it is closer to paintings made in Naples. Adrian Hoch suggested that it could have been commissioned by the Provençal Franciscan, Fra Philip Alquier, who between 1342 and 1343 was made guardian by Queen Sancia of Naples of the convent of Santa Maria Maddalena, which she had founded in 1324 for repentant prostitutes: Fra Philip's meditations on the Passion of Christ were so intense that he himself bled from his hands, feet and side, which would explain the presence of Mary Magdalene, who was present at the Crucifixion, and the symbols of the Passion on the reverse. Queen Sancia herself is also a possibility: she was particularly devoted to Mary Magdalene, as well as to the *Corpus Domini* (body of Christ) or *Hostie Sancte* (host), and could well have identified with the Virgin touching the wounds on the body of Christ in this image.

Large works in particular were sometimes not the responsibility of a single patron. It is here suggested that the San Pier Maggiore altarpiece (NG 569–78) was commissioned by a conglomerate: the unusual selection of saints reflects not the Benedictine Order to which the church belonged, but the commercial and familial interests of the Albizzi family who made

their money in the wool trade and whose burial church San Pier Maggiore was.

Original Location

The original location of paintings which were removed from their original site at an early date can be difficult to pin down. The original location of the *Coronation of the Virgin* (NG 568) by Agnolo Gaddi, given during the nineteenth century as the Convent of Minori Osservanti of San Miniato near Florence, remains elusive.

Martin Davies identified the original patron of Jacopo di Cione's *Crucifixion* (NG 1468) as Cistercian on the basis of the text held by Saint Bernard. It is suggested here, partly on the basis of the addition of a small black hog transforming Saint Benedict into Saint Anthony Abbot, that the painting might have come from Cestello in Florence, either from the main church or from the Chapter House.

A change of location could sometimes lead to a new function. Martin Davies identified the *Baptism* (NG 579.1–5) from the Stoldi Chapel in Santa Maria degli Angeli, Florence, by Niccolò di Pietro Gerini as having been at one time in the monastery of San Giovanni Decollato del Sasso near Arezzo. Here it is suggested that it could have been moved to become the high altarpiece of San Giovanni Decollato del Sasso, probably before 1580, possibly even as early as 1414 when San Giovanni Decollato was united with Santa Maria degli Angeli.

The reconstruction by John White of Duccio's *Maestà* is the one most widely accepted. However, the precise location of the high altar within Siena Cathedral at the time when the altarpiece was commissioned remains problematic, although the monographic treatment of the cathedral in the series *Die Kirchen von Siena* and the further researches of Monika Butzek, always generously shared, have done much to clarify the changes made to the east end of the cathedral and the possible site of the high altar.

Function

The different types of religious paintings discussed in this catalogue include the large *Crucifix* by Segna di Buonaventura (NG 567), the smaller *Crucifix* by the Master of Saint Francis (NG 6361), which may have been carried in processions and possibly also served as a reliquary for a relic of the True Cross, and the plain dossal by Margarito d'Arezzo (NG 564), which may have functioned as an altarpiece, even if it reflects the shape of an antependium (or altar frontal). Many of the panels are fragments of altarpieces – side and central panels, pinnacle and predella panels. Although the Gallery has most of the panels from the enormous altarpiece painted by Jacopo di Cione for San Pier Maggiore in Florence, the subsidiary panels such as those from the predella are either in other collections or missing, and it is not until Giovanni dal Ponte's altarpiece for San Giovanni Evangelista, Prato Vecchio, painted at the

beginning of the fifteenth century, that we find a complete multi-panelled altarpiece in the National Gallery, and even that was reframed in the nineteenth century, with the regilding of the sides of the pilasters possibly obliterating figures originally painted there.¹³

The function of small religious paintings is not always straightforward. Victor Schmidt's admirable survey in 2005 of small portable devotional paintings has elucidated the way in which they were used. The question remains whether the triptych by Duccio (NG 566) was one of the three panels described as having been placed on an altar.

One small panel whose function may have been unusual is Andrea di Bonaiuto's painting of the *Virgin and Child with Ten Saints* (NG 5115). In 1951 Millard Meiss recognised that the saints depicted all had altars in Santa Maria Novella; in fact their position on the painting mirrors the location of their titular chapels in the east end of the church. It therefore acted as a mnemonic. However, who used it and how and when are questions which remain unresolved.

We know very little about how paintings were regarded by those people who used them. Paintings were sometimes a catalyst for visions, particularly for mystics. Saint Francis was famously spoken to by the Crucifix in San Damiano, Blessed Clare of Rimini was also spoken to by an image of Christ, and the vision depicted in NG 6503 may have been inspired by a fresco of Christ enthroned in Sant'Agostino, Rimini. Sometimes the image depicted in a painting seems to have been secondary to its function. The many benefactors of the Camaldolese monastery of Santa Maria degli Angeli in Florence, for instance, rarely stated what should be depicted in the altarpieces for the chapels they endowed: altarpieces – like chalices, missals, altarcloths, etc. – were just one element of what pertained to the furnishing of a chapel. So, for example, the bequest for the chapel which housed the altarpiece of the *Baptism* by Niccolò di Pietro Gerini (NG 579.1–5) was for the building of a chapel dedicated to Saint John the Baptist with an altar and other things necessary as required; an altarpiece was not even specified, let alone its subject matter.

Scholarship and Beyond

This catalogue has benefited from a number of substantial exhibitions in recent years, which have contributed significantly to our understanding of the period. There are also a number of scholars who have considerably advanced our knowledge of thirteenth- and fourteenth-century Italian painting and whose contributions are consequently reflected in the catalogue entries. This work continues and the current state of scholarly interest in early Italian painting is such that a catalogue like this one is inevitably out of date before the ink is even dry. Finality and comprehensive knowledge are aims to which scholars might aspire but which, on reflection, are sometimes elusive and potentially illusory.

NOTES

1. In this introduction references will only be given for paintings not included in the catalogue or not referenced under the relevant entry.

2. For English collectors and the formation of the early Italian collection in the National Gallery see the essay by Susanna Avery-Quash in Gordon 2003, pp. xxv–xliv.

3. For the Layard Collection see Davies 1961, p. 574; Susanna Avery-Quash in Gordon 2003, pp. xxxv.

4. For Murray see Susanna Avery-Quash in Gordon 2003, pp. xxxiv–xxxv.

5. For the purchase of the Lombardi-Baldi Collection see Davies 1961, pp. 565–7;

Susanna Avery-Quash in Gordon 2003, pp. xxx–xxxv.

6. See Alessandro Bagnoli in Guerrini and Seidel 2003, pp. 107–47.

7. For this painting see Gordon 2003, pp. 162–87.

8. The term ‘companion panels’ coined by Carl Strehlke in his catalogue of 2004 of the paintings in the John G. Johnson Collection, Philadelphia, is used here rather than ‘related panels’ used by the present author for the catalogue of Italian fifteenth-century paintings in the National Gallery published in 2003, since it better expresses the relationship.

9. Bent (1993) 1998, and Bent 2006.

10. Laurence Kanter has suggested that the *Resurrection* attributed to the Sienese painter Martino di Bartolomeo is in fact Florentine, and is the missing pinnacle panel. The reasons why the present author considers this to be incorrect are given under the catalogue entry for NG 3894. However, Kanter will be pursuing further research on this problematic altarpiece.

11. Exh. cat. *Art in the Making* 1989.

12. Exh. cat. *Art in the Making* 1989, p. 81, see also pp. 86, 89 and 97.

13. For this painting (NG 580) see Gordon 2003, pp. 104–17.

Agnolo Gaddi, *The Coronation of the Virgin* (NG 568), detail of the angels.



The Organisation and Method of the Catalogue

SEQUENCE

The artists are listed in alphabetical order. Paintings are catalogued in chronological order under the artist's name. Some artists are identified only as the master of a particular work, such as the Master of the Borgo Crucifix; others are known only through their association with a particular area, such as Pisa, Venice or Umbria.

ATTRIBUTION

A painting is discussed under the artist's name where the authorship is not considered to be in doubt. 'Attributed to' implies a certain measure of doubt.

DIMENSIONS

Dimensions are given in centimetres; height is preceded by width.

TECHNICAL INFORMATION AND METHOD

The paintings listed here, except Segna di Buonaventura's *Crucifix* (NG 567), Spinello Aretino's fresco (NG 1216.1) and Jacopo di Cione's *Crucifixion* (NG 1468), have been re-examined for this catalogue in the conservation studios. The paintings have been remeasured and examined with X-radiography and infrared reflectography wherever possible.

The X-radiographs were made using conventional X-ray sensitive film sheets (30 × 40 cm, Kodak Industrex AA400), which have been scanned to produce 16-bit mono TIFF digital images and finally assembled using software to produce a mosaic.¹ A complete survey of the paintings in infrared was made using a Hamamatsu C2400 vidicon system, equipped with a N2606-06 vidicon tube, which is sensitive between 500 and 2200 nm (radiation shorter than 900 nm was excluded using a Kodak 87A filter). Where features of interest were identified these were then recorded subsequently, when it became available, with SIRIS or OSIRIS, the Gallery's digital infrared imaging systems, equipped with InGaAs detectors sensitive between 900 and 1700 nm.² The paintings were examined with a Wild M650 stereo-binocular operating microscope at magnifications between 6× and 40×. Photomicrographs were taken using a Zeiss Axiocam HrC mounted on the Wild microscope.

Occasionally references are made to X-radiographs and infrared images which are not illustrated; this is because once these images are reduced to page size the information they contain is often no longer decipherable.

Technique and condition are discussed together since the condition of a painting is often, among other factors, the result of the techniques employed in its making.

SUPPORT

Descriptions of construction and carpentry are based on direct physical examination, infrared images and X-radiographs. The support is assumed to be poplar unless otherwise stated. Where the wood has been identified positively, this is noted.

MEDIUM

The medium of the paint is assumed to be egg tempera unless otherwise stated. For some of the works, analysis of the binding medium in paint samples has been carried out using Fourier transform infrared microscopy (FTIR) and gas chromatography–mass spectrometry (GC–MS), usually during earlier examinations or in conjunction with conservation treatment. The results are described in the individual catalogue entries and, where published, the reference is given. Some further analysis of samples from a few of the paintings has been carried out specifically for this catalogue.

GILDING AND TOOLING

Information on gilding is presented before that on painting, in keeping with the order of execution. Mordant gilding and silvering are included in the discussion on gilding, despite being applied in the later stages, so that all the techniques of metal leaf decoration could be discussed together. The individual punches are described, but the reader is also referred to Erling Skaug's catalogue published in 1994. The particular gilding technique used by the artists has generally been identified from examination of the surface of the painting with a stereomicroscope. In some cases samples were available from previous examinations and were re-examined, or occasionally a new sample was taken, particularly where analysis of the metal leaf or investigation of the composition of a mordant was of interest. Where metal leaf has been identified, this has been confirmed with energy dispersive X-ray analysis in the scanning electron microscope (SEM-EDX).

PUNCH MARK ILLUSTRATIONS

Unfortunately, when printed, some photomicrographs that show depressions in a paint surface appear to the reader reversed. This is particularly disturbing with some images of punch marks in gilding which may seem to show raised *pastiglia*. This phenomenon is a result of the way the human brain interprets visual signals; expecting a pattern of shadows and highlights to have been caused by raised areas (which would be more usual in normal life), this is the message sent to the reader by the brain.

PIGMENTS

Descriptions of the pigments for many of the paintings were available from earlier research carried out during the preparation for the 1989 exhibition *Art in the Making: Italian Painting before 1400*. Information also existed from studies of new acquisitions or from analysis carried out in support of conservation treatment. The paint samples that existed from earlier examinations were re-examined with optical microscopy, SEM-EDX and occasionally Fourier transform infrared (FTIR) microscopy. A limited number of new samples were taken to address specific questions that arose during the research for the catalogue. The surface of the paintings was examined under a stereomicroscope wherever possible at magnifications of up to 40×. At this magnification many pigments can be identified with a reasonable degree of reliability, and these examinations greatly extended the information on pigments and pigment mixtures in areas of the paintings that were not sampled, and enabled the observations from samples to be correlated with the appearance of the painting itself.

COMMENTS

As full an account as possible is given with regard to authorship, companion panels – particularly relevant for altarpieces – subject matter, iconography, original location, date, patronage and so on. The compiler has tried to make this information accessible to the lay reader as well as to the art historian. Inevitably there is a certain amount of speculation, but it is made clear where an argument is hypothetical. For ease of reference the comments are given subheadings, but their sequence varies according to the requirements of the argument.

NOTES AND REFERENCES

1. X-radiography and the associated scanning of the plates and processing were carried out by the photographic departments of the National Gallery. For a full description of the process see J. Padfield, D. Saunders, J. Cupitt and R. Atkinson, 'Improvements in the Acquisition and Processing of X-ray images of paintings', *National Gallery Technical Bulletin*, 23, 2002, pp. 62–75.
2. For more details on SIRIS see D. Saunders, R. Billinge, J. Cupitt, N. Atkinson and H. Liang, 'A new camera for high-resolution infrared imaging of works of art', *Studies in Conservation*, 51, 2006, pp. 277–90.

List of Artists and Paintings

Allegretto Nuzi and Francescuccio Ghissi

5930 *Saints Catherine and Bartholomew*

Andrea di Bonaiuto da Firenze

5115 *The Virgin and Child with Ten Saints*

Barnaba da Modena

2927 *The Coronation of the Virgin*
The Trinity
The Virgin and Child with Donors
The Crucifixion
The Twelve Apostles

1437 *Pentecost*

Cimabue (Cenni di Pepo)

6583 *The Virgin and Child with Two Angels*

Jacopo di Cione

1468 *The Crucifixion*

AND WORKSHOP

The San Pier Maggiore altarpiece:

- 569.1 *The Coronation of the Virgin*
- 569.2 *Adoring Saints*
- 569.3 *Adoring Saints*
- 570 *The Trinity*
- 571 *Seraphim, Cherubim and Adoring Angels*
- 572 *Seraphim, Cherubim and Adoring Angels*
- 573 *The Nativity with the Annunciation to the Shepherds and the Adoration of the Shepherds*
- 574 *The Adoration of the Magi*
- 575 *The Resurrection*
- 576 *The Three Marys at the Sepulchre*
- 577 *The Ascension*
- 578 *Pentecost*

ATTRIBUTED

3894 *Noli me tangere*

Nardo di Cione

581 *Saint John the Baptist, Saint John the Evangelist(?) and Saint James*

Bernardo Daddi

6599 *The Coronation of the Virgin*

Dalmatian/Venetian School (Master of Helsinus / Master of the Tkon Crucifix / Meneghello di Giovanni de' Canali)

Altarpiece of the Virgin Mary:

- 4250.1 *The Virgin and Child*
- 4250.2 *Saint Joachim's Offering Rejected*
and *The Meeting at the Golden Gate*
- 4250.3 *The Angel appearing to Saint Joachim*
and *The Birth of the Virgin*
- 4250.4 *Helsinus saved from Shipwreck*
and *A French Canon drowned by Devils*
- 4250.5 *Helsinus preaching the Celebration*
of *the Feast of the Conception*
and *The French Canon restored to Life*
- 4250.6 *Christ and Eight Apostles*
- 4250.7 *Two Apostles*
- 4250.8 *Two Apostles*

Duccio di Buoninsegna

Predella panels from the *Maestà*:

- 1139 *The Annunciation*
- 1140 *The Healing of the Man born Blind*
- 1330 *The Transfiguration*
- 566 *The Virgin and Child with Saint Dominic and Saint Aurea, and Patriarchs and Prophets*

Florentine School

3120 *Saint Peter*

Francesco da Rimini (Master of the Blessed Clare)

6503 *The Vision of the Blessed Clare of Rimini*

Agnolo Gaddi

568 *The Coronation of the Virgin*

Giotto di Bondone

AND WORKSHOP

5360 *Pentecost*

Giovanni da Milano

- 1108 *Christ and the Virgin Enthroned with Six Saints*
- 579.6 *The Apocalyptic Christ (Son of Man)*
- 579.7 *The Virgin*
- 579.8 *Saint John the Baptist*

Giovanni di Nicola

3896 *Saint Anthony Abbot*

Giusto de' Menabuoi

701 *The Coronation of the Virgin,
Scenes from the Lives of Joachim and Anna,
and from the Life of the Virgin*

Jacobello del Bonomo

ATTRIBUTED

3893 *The Man of Sorrows*

Lippo di Dalmasio

752 *The Madonna of Humility*

Ambrogio Lorenzetti

1147 *A Group of Four Poor Clares*

Pietro Lorenzetti

AND WORKSHOP

1113 *Saint Sabinus before the Roman Governor
of Tuscany*

3071 *A Crowned Female Figure (Saint Elizabeth
of Hungary?)*

3072 *A Female Saint (the Annunciate Virgin or
one of the Marys?)*

Lorenzo Veneziano

3897 *The Madonna of Humility with Saints Mark
and John the Baptist*

Margarito d'Arezzo

564 *The Virgin and Child Enthroned, with Scenes
of the Nativity and the Lives of Saints*

Master of the Albertini (Master of the Casole Fresco)

565 *The Virgin and Child with Six Angels*

Master of the Borgo Crucifix

(Master of the Franciscan Crucifixes)

6572 *The Virgin and Child*

6573 *The Man of Sorrows*

Master of the Clarisse (Rinaldo da Siena?)

6571 *The Virgin and Child*

Master of the Palazzo Venezia Madonna

4491 *Saint Mary Magdalene*

4492 *Saint Peter*

Master of Saint Francis

6361 *Crucifix*

Neapolitan Follower of Giotto

3895 *The Dead Christ and the Virgin*

Niccolò di Buonaccorso

1109 *The Marriage of the Virgin*

Niccolò di Pietro Gerini

579.1–5 *The Baptism of Christ, with Saints Peter
and Paul, and Scenes from the Life of
Saint John the Baptist*

Pisan School

4741 *The Virgin and Child with Two Angels (stolen)*

Segna di Buonaventura

567 *Crucifix*

Spinello Aretino (Spinello di Luca Spinelli)

276 *Two Haloed Mourners*

1216.1 *Saint Michael and Other Angels*

1216.2 *Decorative border with a Kneeling Flagellant
and Saints Michael and Stephen*

1216.3 *Decorative border with a Seraph
and Saint Catherine*

Ugolino di Nerio

Panels from the altarpiece for Santa Croce, Florence:

1188 *The Betrayal of Christ*

1189 *The Way to Calvary*

3375 *The Deposition*

3376 *Isaiah*

3377 *Saints Simon and Thaddeus*

3378 *Spandrel Angels*

3473 *Saints Bartholomew and Andrew*

4191 *The Resurrection*

6484 *Moses*

6485 *David*

6486 *Spandrel Angels*

ATTRIBUTED

6386 *The Virgin and Child with Four Angels*

Umbrian School (Master of San Crispino?)

4143 *An Evangelist*

4144 *An Evangelist*

4145 *A Bishop Saint*

Changes of attribution

since the publication in 1988 of *The Early Italian Schools Before 1400*

OLD ATTRIBUTION	INVENTORY NUMBER	NEW ATTRIBUTION
Ascribed to Allegretto Nuzi	NG 5930	Allegretto Nuzi and Francescuccio Ghissi
Ascribed to Andrea di Bonaiuto da Firenze	NG 5115	Andrea di Bonaiuto da Firenze
Ascribed to Jacopo di Cione and Workshop	NG 569–78	Jacopo di Cione and Workshop
Dalmatian School	NG 4250	Dalmatian/Venetian School
Follower of Duccio	NG 6386	Ugolino di Nerio (attributed)
Florentine School	NG 3895	Neapolitan Follower of Giotto
Attributed to Agnolo Gaddi	NG 568	Agnolo Gaddi
Ascribed to Giotto	NG 5360	Giotto di Bondone and Workshop
Style of Giovanni da Milano	NG 1108	Giovanni da Milano
Ascribed to Pietro Lorenzetti	NG 1113	Pietro Lorenzetti and Workshop
Attributed to Lorenzo Veneziano	NG 3897	Lorenzo Veneziano
Master of the Blessed Clare	NG 6503	Francesco da Rimini (Master of the Blessed Clare)
Master of the Casole Fresco	NG 565	Master of the Albertini (Master of the Casole Fresco)
Master of the Lehman Crucifixion	NG 3894	Jacopo di Cione (attributed)
Attributed to the Master of Saint Francis	NG 6361	Master of Saint Francis
Ascribed to Niccolò di Pietro Gerini	NG 579.1–5	Niccolò di Pietro Gerini
Style of Segna di Bonaventura	NG 567	Segna di Buonaventura
Tuscan School	NG 4741	Pisan School
Umbrian School (?)	NG 4143–5	Umbrian School (Master of San Crispino?)
Venetian School	NG 3893	Jacobello del Bonomo (attributed)

Paintings acquired since 1988

Cimabue NG 6583, *The Virgin and Child with Two Angels*

Bernardo Daddi NG 6599, *The Coronation of the Virgin*

Master of the Borgo Crucifix (Master of the Franciscan Crucifixes) NG 6572 and 6573, *The Virgin and Child* and *The Man of Sorrows*

Master of the Clarisse (Rinaldo da Siena?) NG 6571, *The Virgin and Child*

Paintings relocated since 1988

Greco-Roman School: NG 3931, on loan to the British Museum since 2004; NG 3932, on loan to the British Museum since 1994; NG 5399, transferred to the British Museum in 1995.

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564	Margarito d'Arezzo	3473	Ugolino di Nerio
565	Master of the Albertini (Master of the Casole Fresco)	3893	Jacobello del Bonomo (attributed)
566	Duccio di Buoninsegna	3894	Jacopo di Cione (attributed)
567	Segna di Buonaventura	3895	Neapolitan Follower of Giotto
568	Agnolo Gaddi	3896	Giovanni di Nicola
569.1–3	Jacopo di Cione and Workshop	3897	Lorenzo Veneziano
570–8	Jacopo di Cione and Workshop	4143	Umbrian School (Master of San Crispino?)
579.1–5	Niccolò di Pietro Gerini	4144	Umbrian School (Master of San Crispino?)
579.6–8	Giovanni da Milano	4145	Umbrian School (Master of San Crispino?)
581	Nardo di Cione	4191	Ugolino di Nerio
701	Giusto de' Menabuoi	4250.1–8	Dalmatian/Venetian School (Master of Helsinus / Master of the Tkon Crucifix / Meneghello di Giovanni de' Canali)
752	Lippo di Dalmasio	4491	Master of the Palazzo Venezia Madonna
1108	Giovanni da Milano	4492	Master of the Palazzo Venezia Madonna
1109	Niccolò di Buonaccorso	4741	Pisan School
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1188	Ugolino di Nerio	6386	Ugolino di Nerio (attributed)
1189	Ugolino di Nerio	6484	Ugolino di Nerio
1216.1–3	Spinello Aretino (Spinello di Luca Spinelli)	6485	Ugolino di Nerio
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1468	Jacopo di Cione	6571	Master of the Clarisse (Rinaldo da Siena?)
2927	Barnaba da Modena	6572	Master of the Borgo Crucifix (Master of the Franciscan Crucifixes)
3071	Pietro Lorenzetti and Workshop	6573	Master of the Borgo Crucifix (Master of the Franciscan Crucifixes)
3072	Pietro Lorenzetti and Workshop	6583	Cimabue (Cenni di Pepo)
3120	Florentine School	6599	Bernardo Daddi
3375	Ugolino di Nerio		
3376	Ugolino di Nerio		
3377	Ugolino di Nerio		