

EARLY COLOUR PRINTING

German Renaissance Woodcuts at the British Museum



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German Renaissance Woodcuts
at the British Museum

Elizabeth Savage

PAUL HOLBERTON PUBLISHING
in association with
THE BRITISH MUSEUM

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ISBN 978 1 911300 75 5

British Library Catalogue in Publishing Data

A CIP record of this publication is available
from the British Library

Produced by Paul Holberton Publishing
89 Borough High St, London SE1 1NL
WWW.PAULHOLBERTON.COM

Designed by Laura Parker

Printed by Gomer, Llandysul

FRONT COVER Lucas Cranach, *St George*, 1507 (detail of no. 11)

BACK COVER Hans Wechtlin, *Skull in Frame*, c.1510–13 (detail of no. 32a)

FRONTISPIECE Hans Wechtlin, Orpheus, c.1510–13 (detail of no. 36)

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Foreword

OLENKA HORBATSCH

The British Museum holds one of the finest collections of early German prints, assembled over the past 250 years from private collections, gifts, bequests and purchases – the most recent object in this catalogue was acquired in 2017. The London collection rivals the great historical collections in Germany and Austria which descend from princely collections that can be traced back to the sixteenth century. Engravings were prized by early print collectors, especially the refined examples of Martin Schongauer and Albrecht Dürer. Woodcuts, which were greatly valued in the first half of the sixteenth century, subsequently became associated with high volumes of cheaply produced images, with the exception of artists who worked across media like Dürer and Lucas Cranach. Early woodcuts – often anonymous, altered, or fragmented – evaded traditional collecting interests and were omitted from Adam von Bartsch's *Le Peintre Graveur* in the early nineteenth century.

The first important collection of German woodcuts at the Museum was bequeathed by the sculptor Joseph Nollekens (1737–1823): 428 sheets, including Dürer's *Great Column and Triumphal Arch*. William Mitchell (1820–1908), who focused his collecting entirely on early German woodcuts, which was highly unusual at the time, gifted his comprehensive collection to the Museum at the end of the nineteenth century: 1,290 single-sheet prints (including the brilliant impression of Cranach's *St George*, no. 11) and 163 illustrated books. Campbell Dodgson (1867–1948) catalogued Mitchell's collection, and subsequently compiled the definitive catalogue of northern woodcuts in the Museum

(2 vols., 1903 and 1911), which, though not completed, remains an invaluable source of information about the collection. Dodgson became Keeper of the Department of Prints and Drawings in 1912, and he supplemented the Mitchell collection with important acquisitions of German woodcuts at auctions.

This catalogue surveys the first 150 years of colour prints from the German-speaking lands through the British Museum's collection, and traces the emergence, innovation and diffusion of printing in colour. By focusing on technique (rather than individual artist or region), Elizabeth Savage readdresses the long-standing distinction between book publishing and single-sheet prints: the so-called invention of the technique by Cranach and Hans Burgkmair is considered here alongside the output of the lesser-known printer Erhard Ratdolt. The first half of the catalogue traces social, religious and geo-political impulses for printing in colour: pre-Reformation piety, humanism, and the innovative imperial patronage of Emperor Maximilian I (r. 1508–19). The second half of the catalogue examines the range of applications of colour printing and the revivals of the technique towards the end of the sixteenth century. A dazzling variety of printed material is brought together: alongside artistic prints aimed at humanists, emperors and collectors, scientific illustrations, musical scores in missals, devotional icons, ephemeral prints, designs for craftsmen, and propaganda are elegantly put together in this catalogue. It clearly demonstrates that the history of printmaking was not black and white.

Author's Acknowledgements

Some of this text was first presented in a display of colour printmaking in early modern Germany that I curated at the British Museum, 'German Renaissance Colour Woodcuts' (25 November 2015–26 January 2016). Years beforehand, Mark McDonald (Metropolitan Museum of Art) suggested that I share my doctoral research in a display at the Department of Prints and Drawings, British Museum. After my thesis had passed, Hugo Chapman (British Museum) kindly made that possible. The exhibition coincided with the launch of *Printing Colour 1400–1700: Histories, Techniques, Functions and Receptions* (Brill, 2015), which I edited with Ad Stijnman. Requests for an exhibition catalogue prompted me to expand the information into this collection guide. The scope has quadrupled to represent the British Museum's holdings more fully, and longer texts provide more information than display captions could contain. The inclusion of more book illustrations as well as text, music, diagrams and an *ex libris* help contextualize the more famous single-sheet, or 'fine art', woodcuts. As a result, much of the information presented here is based on new research that has not been previously published. But that research developed over many years, and it would have been impossible without the advice and encouragement of many researchers, curators, collectors and historical printers.

I am especially grateful to the Department of Prints and Drawings. Access to its rare books and uncatalogued materials allowed me to identify more examples which are described as colour prints, and reproduced for the first time in this book. Giulia Bartrum generously assisted with the display, and she and Olenka Horbatsch helped shape the text of this book.

Some research presented here derives from my doctoral dissertation. I thank my supervisors Jean

Michel Massing (Cambridge University) and Berthold Kress (Staats- und Stadtbibliothek Augsburg) as well as my committee members Antony Griffiths (British Museum) and David McKitterick (Cambridge University) for their encouragement to publish this research – and for their patience as I did so. Ad Stijnman offered generous advice on this continuing line of research, especially related to intaglio. Beatriz Waters (British Museum Images) enthusiastically sourced new, hi-res photographs so that many impressions could be reproduced in accurate colour for the first time in this book. Clare Lees and Andrew Nash (both Institute of English Studies, School of Advanced Study, University of London) provided encouragement. Elisabeth Giselbrecht, Ceren Özpınar and Chloe Ward provided motivation. Laura Parker designed the book beautifully, and Katherine Bogden Bayard made the process run smoothly from idea through to marketing. I am thrilled that Paul Holberton offered to publish it. His idea to offer life-size reproductions where possible made the prints come to life, and his insistence on high production values at reasonable price points is a model for academic presses. His careful edits improved the text, including translations from Neo-Latin. Of course, all errors (Neo-Latin and otherwise) are my own.

This book project was supported by a British Academy Postdoctoral Fellowship, based on research supported by a Promotionsstipendium from the Gerda Henkel Stiftung. The writing up was supported by the Conivncta florescit (Wolfgang Ratjen Fellowship, Zentralinstitut für Kunstgeschichte). I thank the Bibliographical Society and Institute for English Studies for supporting the research photography, and the British Museum for classifying this project as part of its public task and thus waiving reproduction fees.

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Introduction

This book introduces the earliest colour prints from the first wave of colour woodcut production in the early modern German-speaking lands, using the British Museum's collections. It aims to reproduce every colour impression (individual exemplar, parallel to a copy of a book) of every single-sheet fifteenth- and sixteenth-century German print held in the Department of Prints and Drawings. It offers a representative selection of comparative material in other media and formats. Colour impressions are so rare in comparison to 'normal' woodcuts, with an outline printed in monochrome black, that it could also be described as covering German colour printing during the entire hand-press period (pre-industrial printing, or from Johannes Gutenberg's invention of the printing press around 1455 until the Industrial Revolution in the 1830s). The second wave emerged nearly 500 years after Gutenberg, led by modernist art movements at the turn of the twentieth century.

This guide covers the first 150 years of printing, which is often called the 'early modern' period in the German-speaking lands. The discussion begins with the first attempts to incorporate colour into printing in the early 1400s, before Gutenberg, and encompasses cultural changes from the end of the Middle Ages. It continues through the Renaissance and Reformation in the 1500s. It ends around 1600, when relief printmaking (with the design above the surface; usually woodcut, rarely metalcut) was superseded by intaglio (with the design incised into the surface; usually engraving, less often etching). The last section surveys revivals of this first heyday of German colour woodcut from the 1600s until the mid-1800s.

Hundreds of colour prints known from the early modern German-speaking lands are in relief.

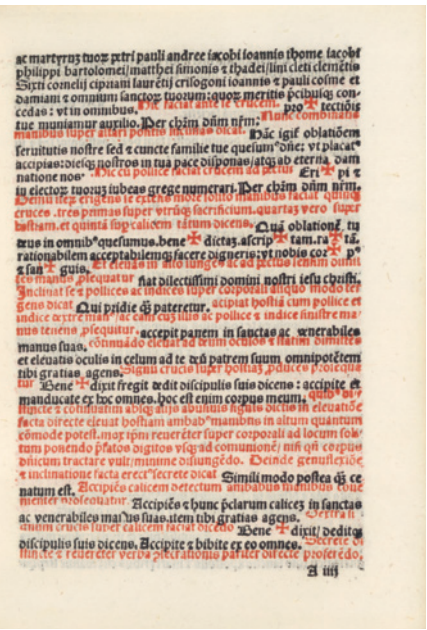
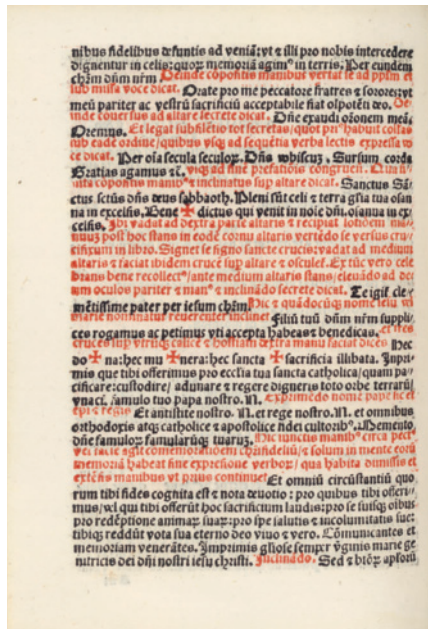
Most are book illustrations. Only about a dozen impressions are in intaglio, almost all single-sheet prints. That is why all but two prints in this guide are woodcuts: one is an extremely rare example of colour-printed intaglio title pages, and the other might be the only single-sheet intaglio print issued in multiple colours in the early modern German-speaking lands held by the British Museum (no. 67). The third category of printing, planographic (with the design on the same level as the surface, i.e. lithography), developed centuries later. Colour-printing techniques remained relatively consistent throughout the long sixteenth century. For that reason, illustrations, texts, music, diagrams and prints in other formats are included in this book only if they represent a significant advance or a typical manner of printing in colours.

The British Museum holds one of the few collections in the world that offers an overview of early modern colour printing in the German-speaking lands in all categories of production. The collection focuses on single-sheet artworks, but it includes significant books, broadsides, ephemera, decorative art objects, and other materials. The audiences of prints included farmers, who consumed cheap calendars and almanacs; devout Christians, who used devotional images before and after the Reformation; and aristocrats, who collected luxuries printed with gold on parchment. These impressions have never before been brought together in research. Many have not been reproduced or exhibited to the public, and some are identified as colour-printed (not painted) for the first time. Together, they demonstrate that colour was integral to the emergence of printing in German book, print and visual cultures.



FIG. 1 Colophon of *Directorium Frisingense* (Venice: Petrus Liechtenstein; Augsburg: Johannes Oswald, 1516). British Museum, presented by the Art Fund, 1908, I231.4

FIG. 2 As above, fols. Aiii^v-Aiii^r



WHAT SURVIVES?

Early modern German colour prints are considered extremely rare today. Hundreds of thousands of single-sheet woodcuts were issued in black, but only about seventy are known to have been printed in colour. Some of those seventy titles survive in many dozens of colour-printed impressions. Others survive in a single, unique colour impression and in many other impressions in monochrome black. But if book illustrations, decorative art and ephemera, including almanacs and calendars, are considered, it can be estimated that many tens of thousands of colour-printed woodcuts circulated in the German-speaking lands throughout the sixteenth century.

If text-based print projects are included, that number will increase dramatically. Calendars, printer's devices (fig. 1), music, diagrams, even passages of text with extensive 'rubrication' or red text (fig. 2) demonstrate that many if not most printers were skilled colour printers, even

if their projects did not involve images printed from multiple colours.

The patterns of loss for early modern printed material surely apply to colour printing. For fifteenth-century woodcuts, Richard Field estimated that 99% of impressions have been lost (Field 2005, p. 19). He warned that the actual rate of loss might be substantially higher; of course, that estimate is based on only those prints that we know about. For sixteenth-century printed material, Antony Griffiths argued that losses can range from significant to total, depending on the category (Griffiths 2018, pp. 195–213). Like all artefact-based historical research, this study can assess only what happens to have survived, not what was produced.

Printed material made for specific functions would have different rates of loss. This book focuses on single-sheet prints, but the vast majority of colour prints were produced for books or ephemera, including broadsides and pamphlets that were

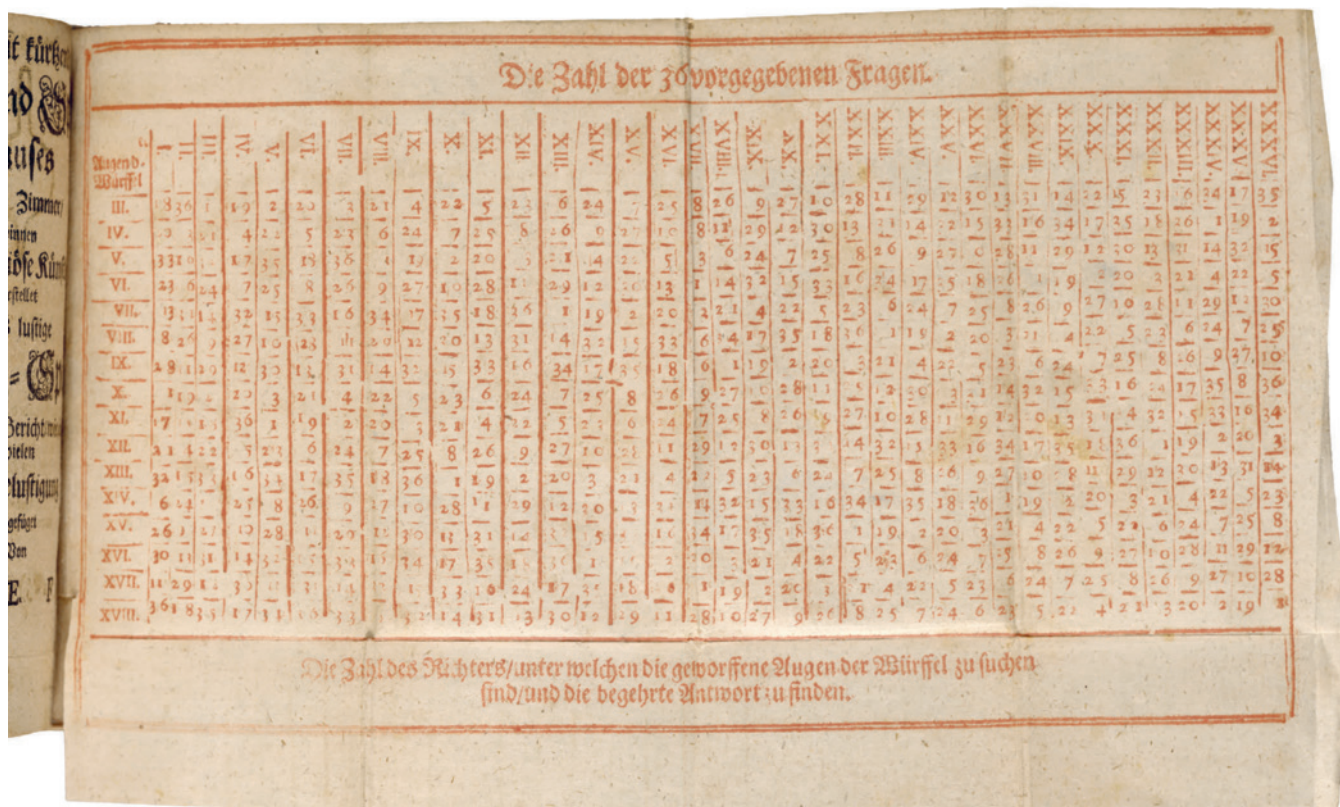


FIG. 3 *Die Zahl der 36 vorgegebenen Fragen*, letterpress (red), 163 × 425 mm (sheet). Pasted into Eberhard Welper, *Das Zeit kürtzende Lust- und Spiel-Hauß* (Kunstburg: Christian Gensch, 1690). British Museum, bequeathed by Lady Charlotte Schreiber, 1896,0501.1703.13

intended to be used and then discarded. Five entries represent a form of decorated paper called *Fladerpapier* (intarsia paper; German: ‘wood-grain paper’) that was produced to be pasted on to objects and walls. Sixteenth-century archival records suggest that vast quantities of *Fladerpapier* designs were produced over centuries. These sheets are vanishingly rare today, not least because walls are prone to damp and redecoration.

In other words, no catalogue can be complete. This guide surveys many of the single sheets and books in the department of Prints and Drawings, but there is always more to discover. Additional examples of colour printing in the British Museum’s collections will likely be identified. This is especially true of material that falls between the boundaries

of modern disciplines, including printed games (fig. 3) and *ex libris* (bookplates; no. 56), from the sixteenth and seventeenth centuries. As the *ex libris* collection has not yet been catalogued, this guide includes a single sixteenth-century woodcut example to represent that function of colour printing in the sixteenth-century German-speaking lands. It is one of several that are identified as colour prints and reproduced in colour for the first time in this book.

A BRIEF HISTORY OF COLOUR PRINTING

The origins of colour printing depend on its definition. Textiles have been block-printed (stamped) for millennia. The earliest European recipes for colour block-printing inks date from the 1300s. Long before the printing press was invented

and spread, repeatable images were produced with manual printing techniques, including rubbing (no. 1). In some copies of the Gutenberg Bible, text was printed in red and black. Initials were first printed from multiple colours in 1457. Images were printed from multiple, adjacent colours from the 1470s using manual printing techniques. Images and diagrams were printed from multiple, superimposed or overlapping colours from the 1480s.

In the German-speaking lands, images were printed from multiple superimposed colours from which highlights were cut out from the early 1500s. The removal of highlights from tone blocks to create three-dimensional effects has been celebrated as a landmark of artistic invention, but some illustrations from the first years of the sixteenth century attest this style long before it was used in fine art. Regardless of which starting point is chosen, the history is one of incremental steps, repeated re-inventions, and long-lived practices that were spread across the print world.

In the sixteenth century, Italy was the main centre of the artistic production of colour prints until around 1600, when woodcut fell out of fashion. Individual designers continued to print in colour, but colour intaglio printing was first achieved on a large scale around 1700. In the Netherlands, Johannes Teyler (1648–1709?) created a workshop for colour-printing on paper and fabrics from 1685 to 1697. It specialized in what was later called *à la poupée* printing, in which all the colour inks were applied to a surface so that colourful ‘painted prints’ could be issued in just one run through the press.

From 1705, Jakob Christoff Le Blon (1667–1741) invented a way to render ‘natural’ colours from three primaries, printed in three runs through

the press, using a tonal intaglio technique called ‘mezzotint’. Today’s equivalent is called ‘process printing’. He printed in the order blue-red-yellow. From the 1720s, he added a final key plate in black or dark blue. Le Blon’s order of blue-yellow-red-black became today’s CMYK: Cyan-Magenta-Yellow-Key (black). Lithography was patented in 1801, and colour printing became viable on an industrial scale soon after chromolithography, an approach to colour lithography, was patented in 1837 (see Twyman 2013). Early German colour woodcuts were reproduced in all of these methods as they were developed, including photolithography (fig. 4; see no. 20).

GERMAN ‘CHIAROSCURO’?

Italian chiaroscuro woodcuts of the sixteenth century might be the best known category of historical colour prints (see Lepape 2018; Takahatake 2018; Gnann 2014). Most build up images from printed tones alone, without black or even an outline. This style of colour printing imitates chiaroscuro drawing, which uses washes of colour similar to modern watercolour. It was invented in 1516, when the Venetian artist Ugo da Carpi received a privilege for a way to make woodcuts that imitate drawings in ‘*chiaro et scuro*’ (‘light and dark’, i.e. in the style of chiaroscuro drawings) (fig. 5). It was favoured by collectors for many generations, and it continues to be today (Griffiths 2018). Not all Italian colour woodcuts are in that style – Ugo’s earliest known two-colour woodcut involves a black outline – but Italian colour woodcuts of this time are generally called ‘chiaroscuro’ (fig. 6).

In the twentieth century, much of the study of the German colour woodcuts was concerned with classifying them as ‘real’ or ‘Italian’ chiaroscuro versus ‘false’ or ‘German’ chiaroscuro. The question



FIG. 4 Anonymous (German?), after Hans Burgkmair, *Johannes Baumgartner* (designed 1512), c. 1878, chromolithograph (three greens), 303 × 245 mm. British Museum, 1878,0209.14



FIG. 5 Ugo da Carpi, after Parmigianino, *Diogenes*, c.1520–30, three-block colour woodcut (browns), 482 × 346 mm. British Museum, 1859,0709.2376

FIG. 6 Ugo da Carpi, after Titian, *St Jerome*, c.1516–17, two-block colour woodcut (greens), 156 × 95 mm. British Museum, 1860,0414.100

is misleading. German printers achieved stunning colouristic effects for generations before Ugo's invention, and Italian and Netherlandish printers had long issued single-sheet intaglio prints in monochrome (fig. 7). Some seem to have deliberately used plate tone, or ink that was not wiped off the surface of the plate before printing, to create a tonal effect. But even after Ugo's style became prominent in Italy, German printmakers did not aim at that aesthetic until the mid-1500s, perhaps the 1570s.

It must be emphasized that influence also ran in the opposite direction, from Germany to Italy. One

of Ugo's competitors in Venice, Lucontonio degli Uberti (c.1503–1557), issued a two-colour woodcut in 1516, the same year as Ugo's 'invention' (no. 24d). It was a close reverse copy after an earlier German print's tone and key block, which Hans Baldung (c.1484–1545) designed in Strasbourg in 1510 (see no. 24a). Italian copies of earlier German



woodcuts were also improved, as it were, with tone blocks produced by Italian chiaroscuro producers (figs. 8–9). German and Italian printers and publishers also collaborated and engaged each other, for instance Petrus Liechtenstein in Venice and Jakob Köbel in Oppenheim (see no. 45).

DEFINING ‘GERMAN’

Most of these prints were produced in the area that is now Germany. The German nation-state did not exist until independent states unified in 1871, so, in this book, ‘German’ is shorthand for ‘the German-speaking lands, in the Holy Roman Empire’. The empire was a major world power for a thousand years, from its foundation by Charlemagne in 800 until its dissolution by Napoleon in 1806. During the long sixteenth century, it included much of northern Europe, or western and central Europe north of the Alps. That term is a helpfully imprecise way to accommodate changing national borders, especially between (parts of) modern Austria, Belgium, Czech Republic, France, Germany, Netherlands, Poland and Switzerland. At times, the Holy Roman Emperor also controlled other territories including Spain, the Spanish Empire, and Portugal. As political boundaries and spelling conventions have changed, the modern names and spellings of cities are used in this book.

Holy Roman Emperor Maximilian I (ruled 1508–19) was the first to harness the power of print for political purposes. His reign is sometimes considered the German Renaissance, but some date a German Renaissance to Gutenberg’s invention of the press c. 1455 or to other cultural landmarks. Others dispute the term, partially because it is considered Italo-centric, and use ‘early modern’



FIG. 7 Anonymous (Netherlandish), *Altarpiece with the Virgin as the Mother of Sorrows*, c. 1500, engraving (orange), 110 × 80 mm. British Museum, 1847,0306.165+

instead. Maximilian was a humanist. He helped revive classical knowledge and modernize the empire, but he was also an antiquarian who styled himself as the ‘last knight’. His great love of printing created a rich culture of print patronage within his court, and he supported this emerging technology to redefine communication and propaganda across his vast, multilingual empire. His advisors and artists competed to expand the boundaries of emerging print technology. This explains why some colour prints were produced with cutting-edge techniques to depict both old-fashioned (medieval Gothic) and modern (Renaissance) styles.



SPECIALIST TERMS

This book addresses ‘colour prints’, here defined as prints from more than one colour of printing ink (including black) and monochromatic prints from any colour other than black. Most are ‘single-sheet prints’, or autonomous images that are printed on one side and can be interpreted without text. Images that were produced to decorate or illustrate text are called ‘illustrations’ here, even if they decorate the title page or are scientific tools rather than visualizing ideas within the text.

Regardless of the format, colour prints were produced from objects like woodblocks, engraved plates, and pieces of moveable type. Artists and art historians call them ‘print matrices’ (or ‘a print matrix’, from Latin: *matrix*, womb) because they

FIG. 8 Albrecht Dürer, *The Man of Sorrows*, letterpress and woodcut (black), 138 × 100 mm (sheet), 86 × 77 mm (image), title page of Albrecht Dürer, *Passio Christi* (‘Small Passion’) (Nuremberg: Hieronymus Hölzel, 1511). British Museum, 1834,0712.4

FIG. 9 Niccolò Boldrini, after Albrecht Dürer, *Man of Sorrows*, 1547–66, two-block woodcut (black, brown), 192 × 137 mm. British Museum, 1918,0713.13

OPPOSITE

FIG. 10 Albrecht Dürer, *The Adoration of the Magi*, first printed 1503, this impression printed mid- or late 1500s, from the series *Life of the Virgin*, woodcut on blue paper, 300 × 212 mm. British Museum, presented by Sir Thomas Barlow, 1924,0419.1

produce multiple impressions of the same design. Book historians and printers tend to use ‘printing surfaces’ instead.

Most colour prints in this book involve two matrices: a ‘key block’ (often a black outline) and a ‘tone block’. Some tone blocks provide ‘spot colour’, or a flat area of colour within a black outline; in others, highlights are cut out so the white of the paper or parchment can shine through. Some designs are ‘independent’, meaning the outline can be printed alone. Others are ‘interdependent’, meaning the matrices make visual sense only if they are all printed together. Some key blocks might seem independent, but the provision of small details only in the tone block make their designs technically interdependent. They must be printed in good ‘register’ (alignment) for the image to appear as intended.

Some colour prints were completed with ‘hand-colouring’, for example painting or ink washes. Hand-colouring generally involves watercolour, bodycolour (watercolour made opaque with the addition of chalk or leadwhite) or heightening (highlights, normally in white).

Following art historical convention, a ‘print’ is a design that survives in individual ‘impressions’. Deliberate alterations to a matrix are identified as different ‘states’, so the timeline of ‘campaigns’ or editions can sometimes be ordered by different states. Bibliographical convention holds that each book is a ‘copy’, but a copy of a print is an imitation. So, figures might reproduce impressions of a print in different states, including some that were used as illustrations in some copies of a book. ‘Deceptive copies’ purport to be authentic pieces by another designer, similar to counterfeit works in the age of



copyright. They often include the target designer’s monogram or initials to further the deception.

In other contexts, the ‘designer’ might be called the ‘artist’. Designers supplied drawings to *Formschneider* (German: block-cutters), who cut them out of wood with knives and gauges. The blockcutter provided printable relief blocks to the ‘printer’. In this book, that can refer to the man (or, less likely, the woman) who owned the business that organized or published a work, or to the manual labourer who worked the press. A ‘printmaker’ is involved with producing prints in an artistic sense, including designers; ‘printmaking’ can be used to distinguish artistic outputs from ‘printing’ text and other information that would not normally be considered fine art.

STRUCTURE OF THE BOOK

Each entry offers a full-page reproduction of a colour print held by the British Museum with a brief introduction to its significance for the history of colour printing. Additional colour impressions in the collection are also reproduced full-page; if key block- or outline-only (black) impressions in the collection or colour impressions in other collections are reproduced, they are often smaller. For the sake of brevity, this guide omits woodcuts that are represented in the British Museum's collections in monochrome black impressions but that survive in colour-printed impressions in other collections. Its scope does not cover prints on stained, dyed or prepared (painted) paper that were printed from only black ink (fig. 9; see no. 8).

In general, the entries introduce three perspectives for understanding each item: its colour-printing technique, historical significance and iconography or content. Each chapter is preceded with an image that provides additional information about the discussion. Some are photomacrographs, or a detail under magnification, that reveal key details of how an item was produced. The volume describes historical trends, but each entry is intended to be independent so that it can be read alone.

The captions follow art historical and bibliographical conventions. Single-sheet prints are captioned without publication details besides the date, unless the printer or town is particularly important, but publication data is provided for books. Short, standardized titles are used rather than full transcriptions. Biblical passages follow the New International Version.

Key references follow each text. 'Bib.' identifies entries in the standard bibliographical references,

and 'Lit.' points to selected additional literature. These notes include only studies that were published after the first formal study of early German colour woodcuts, the second part of the third chapter of Wilhelm Seibt's study of the term *Helldunkel*, 'Chiaroscuro, Camaieu. Holzschnitte in Helldunkel' (Italian, French, and German: 'Light-Dark, Cameo-Coloured: Woodcuts in Light-Dark') (Seibt 1885, especially pp. 18–35). If applicable, the next line gives catalogue entries for other works mentioned in the text, and books are identified by VD16 number.

The chapters are divided chronologically and thematically. They are ordered by the date of the first colour printing of their blocks. Woodblocks that were first designed and printed in the 1500s, but first issued in colour impressions when tone blocks were added in 1600s, are considered to have been created as colour prints in the 1600s. Similarly, a colour impression that was pulled in the 1600s, but from a group of blocks that were first used together for a colour print in the 1500s (even if some blocks might have been replaced), is grouped with others that were designed as colour prints in the 1500s.

Chapter 1 surveys ways in which colour could be built into the printing process without colour printing. Chapter 2 explores the earliest known examples, from two-colour printed images to the first single-sheet colour woodcuts with highlights cut from the tone block. Their three-dimensional effect quickly became standard. Chapter 3 and Chapter 4 cover trends from the two first centres of colour printmaking before the reformation, Augsburg and Strasbourg. They span the election of a great print patron as Holy Roman Emperor Maximilian I in 1508 until the start of the Reformation in 1517 and Maximilian's death in 1519.

After that first burst of production, Chapter 5 introduces the few single-sheet colour prints that were made in the late 1510s and early 1520s for audiences that had not reformed, and Chapter 6 those that were produced for wider audiences after the Reformation. Chapter 7 introduces ways that colour was printed to be lived with, for domestic objects and architectural decoration, from the 1550s until around 1600. Chapter 8 addresses two revivals, if they can be called that, of Italian colour woodcut styles around 1570 as well as the continued production of older styles. Chapter 9 assesses how German Renaissance colour-printing techniques were revived in later centuries.

As a whole, the book illustrates the downward curve of progress that characterizes the history of many colour printing techniques. The earliest works were the most sophisticated and numerous. As the novelty wore off, the extra investment of time and materials must not have paid off. Nevertheless, the longevity of pre-industrial techniques for colour printing, especially in the early modern German-speaking lands, revises fundamental assumptions about the production, functions and markets for printed material.

ABBREVIATED REFERENCES

Bartsch

von Bartsch, Adam. *Le Peintre graveur*. 21 vols. Vienna: J.V. Degen, 1803–21

Dodgson

Dodgson, Campbell. *Catalogue of Early German and Flemish Woodcuts Preserved in the Department of Prints and Drawings in the British Museum*. 2 vols. London: The Trustees, British Museum, 1903 (vol. 1), 1911 (vol. 2)

Hollstein/New Hollstein

German Engravings, Etchings and Woodcuts, 1400–1700. Ed. F.W.H. Hollstein *et al.* Ouderkerk aan den IJssel: Sound & Vision Interactive, 1954–present

ISTC

Incunabula Short Title Catalogue: The International Database of 15th-Century European Printing, <https://data.cerl.org/istc>

Lehrs

Lehrs, Max. *Geschichte und kritischer Katalog des deutschen, niederländischen und französischen Kupferstichs im XV Jahrhundert*. 9 vols. Vienna: Gesellschaft für vervielfältigende Kunst, 1908–34

Strauss

Strauss, Walter Leopold. *Chiaroscuro: The Clair-obscur Woodcuts by the German and Netherlandish Masters of the XVIIth and XVIIIth Centuries*. London; New York: Thames and Hudson; Abaris, 1973. Published simultaneously as: *Clair-Obscur. Der Farbholzschnitt in Deutschland und den Niederlanden im 16. und 17. Jahrhundert*. Nuremberg: Hans Carl Verlag, 1973

VD16

Verzeichnis der im deutschen Sprachbereich erschienenen Drucke des XVI. Jahrhunderts, www.gateway-bayern.de/index_vd16.html

VDM

Verzeichnis deutscher Musikdrucke des 16. Jahrhunderts, www.vdm16.sbg.ac.at



CHAPTER I

Representing Colour without Printing in Colour

IN A SENSE, COLOUR PRINTING COULD BE SAID TO PRE-DATE THE printing press. This section introduces approaches to adding colour, texture and sparkle to printed images as part of the production process, as well as strategies for monochrome black prints to cite colour that they could not depict.

The earliest known multi-colour relief prints are textiles that were block-printed, or stamped, with woodblocks in the 1300s. The earliest known multi-colour intaglio print is an engraved *volvelle* (paper instrument with rotating dials) from around 1476, whose three layers are each inked in monochrome red or black. Nicolaus Götz (*f.* 1474–78) or someone in his employ created it by inking plates in red or black, placing paper on top, rubbing the back, cutting out the dials, stitching them together to combine red and black for visual clarity, and binding the finished product in Lazarus Beham, *Buch von der Astronomie* (Cologne: Nicolaus Götz, c. 1476).

From the early 1400s, at the beginning of European printmaking, printers incorporated colour into prints as part of the production process. For example, some had prints painted freehand in the workshop or with stencils for efficiency. Early printmakers also created ways to represent tonal contrast in black and white, which creates colouristic effects without the use of colour.

Beham, *Buch von der Astronomie*: ISTC ib00296700;
Lit.: see Stijnman and Upper 2014

I

MANUAL PRINTING AND DECORATING

Anonymous (German), *St Dorothy of Caesarea and the Christ-Child in an Apple Tree*,
c. 1450–1500, hand-printed (rubbed) woodcut with mica, quartz crystal,
and tinsel in earlier passe-partout with hand-colouring, 201 × 139 mm.
British Museum, presented by William Mitchell, 1895, 0122.18*

The earliest printmakers presumably adapted techniques for block-printing (stamping) on textiles. This image was printed by hand, not in a press, probably by inking the woodblock, placing the paper on top, and rubbing it. First, the border was printed from one block. Then the image was printed from another. Finally, the paint, paste and tinsel were applied (see detail p. 24). About a dozen ‘tinsel prints’ survive, most dating to about 1430–60. The hand-colouring, like the thick, textured paste and tinsel, is not later decoration but essential to production – and probably to devotional practice.

The iconography depicts St Dorothy with a boy picking apples. They are in a *hortus conclusus* (Latin: enclosed garden), an attribute associated with the Virgin Mary that symbolizes virginity and holy isolation from the world. The silver halo (now oxidized to dark grey/black) identifies the boy as Jesus. According to the legend of St Dorothy,

she was martyred in wintertime. Before she was executed, a lawyer taunted her with a challenge to prove her religion was real by sending him fresh apples and roses from heaven. After her execution, a young boy appeared at his door with three of each. She is patron of gardeners and horticulture.

The print depicts the apple tree as bearing schematic flowers (presumably apple blossoms or roses), but the paste and tinsel reshape the branches. The revised design might be a deliberate alteration of the iconography because the white, tinselled branches bear no fruit or flowers. However, no attributes are replaced in order to identify the image as a different saint. The simplified design was probably not intended to revise the iconography, but was an expedient to apply the tinsel more quickly.

Bib: Dodgson I.90–91.A 80

Lit: Schreiber 1926, no. 1398