

## **A Brighter Vision: European Colour Printing 1450–1830**

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## **General Chronology of European Colour Printing**

- Antecedents (pre-history–1450)
- Printing Colour (1450–1830)
- A Decade of Change (1830–1840)

The following chronology gives a selection of objects, techniques, documents and events that mark developments in the history of European colour printing. *Antecedents* (pre-history–1450) lists the precursors of European colour printing from pre-history. *Printing Colour* (1450–1830) is an overview of the themes discussed in the present volume. *A Decade of Change* (1830–1840) sees the most influential developments that moved printing texts and images into the modern graphic industry.

*Antecedents (pre-history–1450)*

- pre-history      cave paintings with hands dipped in red paint pressed against the walls and red paint sprayed around hands held to the walls are found globally
  
- 7500–5700 BCE   flat stamps with high-relief designs for decorating a support with a colourant in Çatalhöyük, southern Turkey
  
- 5300–350 BCE   rolling stamps with high-relief designs for decorating a support with a colourant in Central America
  
- 3000 BCE        rolling stamps with bas-relief designs for embossing clay from Mesopotamia
  
- 2100–1750 BCE   small flat stamps with bas-relief designs and script for embossing clay from the Indus Valley
  
- 1750–200 BCE   square flat stamps with bas-relief designs and script for embossing clay from China
  
- 1500 BCE–500 CE   flat wooden stamps with high-relief designs or script for embossing clay or dough from Egypt
  
- 1000 BCE–1500 CE   flat stamps with high-relief designs for decorating a support with a colourant from northern South America, Oceania and sub-Saharan Africa
  
- 775–600 BCE    pieces of *electrum* stamped with high-relief designs including lettering
  
- 500 BCE        stamps with bas-relief designs and script for embossing clay in China
  
- 400 BCE        stamping cloth with a colourant in Pakistan and north-west India
  
- 200 BCE–1450   flat wooden stamps with high-relief designs or script for embossing clay or dough and flat bronze or iron stamps possibly for branding skin or wood from the Roman and Byzantine Empire
  
- 200 BCE        stamping cloth with black, red, grey, gold or silver ink in China
  
- 100–500        stoppers on Roman amphorae embossed with traders' marks, sometimes colour stamped

117–138 CE	mould-cast lead ingot with high-relief lettering from England
224–651	stamping fabric in colours and gold in the Sasanian Empire
400	red seals stamped on paper in China
400–600	stamping cloth with a resist before dying and stamping cloth with an ink in Egypt
550–650	figurative designs with Sanskrit text stamped in black on paper in China
650	oil paint used for the decoration of walls and the two giant statues in the Bamiyan Valley, Afghanistan
650–750	Buddhist texts in Sanskrit and Chinese script printed from woodcuts inked in black on paper single leafs and bookscrolls in China
673–685	Chinese monk Yijing observes stamping Buddha's image on silk or paper in India
796–816	Compilation of the Lucca Manuscript that contains two recipes for the production of oil varnish from linseed oil and resin
768–814	stamped wax seals and silver coins with the portrait of Emperor Charlemagne and surrounding lettering in high-relief in Europe
868	dated Chinese <i>Diamond Sūtra</i> bookscroll printed in black from woodcuts containing one sheet with an image and six further sheets with text
900	resist-stamped and dyed cloth from India, retrieved in Egypt
900–1400	stamping cloth in black and gold in Persia
900–1450	woodcuts with texts and decorations stamped with black, sometimes red or green water-based inks on Arabic paper, from Syria and Egypt

- 950 the Egyptian physician Muḥammad bin Aḥmad bin Saʿīd al-Tamīmī describes stamping cloth with an adhesive and next applying gold leaf, and stamping cloth with perfumed paste
- 1000 rooftiles with high-relief lettering in Hildesheim, northern Germany
- 1041–1048 printing text with ceramic type by Bi Sheng in China
- 1119 ceramic plate with bas-relief text and date with all letters embossed with single stamps in Regensburg, southern Germany
- 1200 gilt-silver altarpiece with lettering embossed with individual punches in high-relief in Aquileia, Italy
- 1200/25 printing text with bronze type with black water-based ink in Korea
- 1200–1500 red tiles printed with a wooden stamp dipped in liquid white clay in England
- 1200–1500 red tiles embossed with decoration, imagery and letters by means of wooden stamps with high reliefs, the embossments filled with white slip in England
- 1229 manuscript of *De Materia Medica* by Dioskorides illustrated with inked impressions of medicinal plants, so-called ‘nature prints’
- 1240–1300 written diplomatic letters with stamped red seals were sent from the Il-khanate in Persia to King Louis IX of France and the Pope Innocent IV in Rome
- 1295–1298 hundred copies of the gazetteer of Jingde County, Xuancheng, Anhui, China are printed using movable wooden type on order of Wang Zhen; experiments with tin type fail
- 1301–1316 the Persian scholar Rashid al-Din Hamadani describes woodblock printmaking
- 1350/75 the *Sion textile* is stamped with white-line woodcuts with black and red oil-based inks from northern Italy
- 1350–1450 individual tiles stamped with high-relief letters in Germany and the Netherlands

- 1370/1400 the *Bois Protat* has a *Crucifixion* cut on one side, the other side has a *Annunciation* cut  
c.1460, the block is from south-west Germany or eastern France
- 1377 *Jikji* (*Baegun hwasang chorok buljo jikji simche yojeol*) the oldest surviving book printed from  
bronze type with water-based black ink on paper at Heungdeok temple in Cheongju,  
Korea
- 1396–1402 Cennino Cennini compiles his *Il libro dell'arte*, including chapters on stamping cloth
- 1400–1500 some hundred recipes for oil-based colour inks for stamping fabric are found in art  
technological treatises compiled in England, Germany, Holland, Italy and Sweden
- 1410/30 black-line woodcuts stamped with oil-based (?) inks with further colour-stamped  
decoration on cloth in Central Europe
- 1420 woodcuts printed with black water-based inks on paper in Central Europe
- 1430 German bookbinder Konrad Forster embossed leather bookbindings with individual  
letter stamps
- 1430/40 playing cards printed from engraved copperplates in south-west Germany and printed  
from woodcuts in Italy
- 1444–1446 Procopius Waldvogel teaches the use of his device for semi-mechanically creating  
lettering by means of tin or iron letter forms in Avignon, France
- 1447 The Korean alphabetical script *Hangul* is first cast as metal type sorts and printed
- 1450 manuscripts with woodcuts stamped within the text  
- booklets with series of woodcuts or engravings with hand-written texts
- 1450–1452 metal type letterpress on a sheet of paper printed on both sides with black ink with  
fragments of the text of the *Book of Sibyls* (*Sibyllenbuch* or *Weltgericht*) in Mainz (?),  
Germany  
- development of the wooden bookprinting press in the Mainz area

1450–1510      blockbooks with texts and images printed from woodblocks with water-based black inks  
in Germany and the Netherlands

*Printing Colour (1450–1830)*

- 1450 *ca.* *Virgin and Child in a Glory*, southern Germany, c.1450, woodcut, in white, on one-sided green coated paper
- 1452–1455 tin/lead type letterpress inked in black and red in the *Gutenberg Bible* in Mainz, Germany
- 1453 Paulus Paulerinus of Prague (Czech Republic) describes in his *Liber viginti arcium* that amongst the tools of the goldsmith are forms and a complete alphabet of punches
- 1454 metalcut with the date ‘1454’ cut in the plate
- 1457–1459 metal type letterpress inked in black, blue and red in four books by Fust & Schöffer in Mainz, Germany
- 1457 Johann Fust and Peter Schöffer print a Mainz Psalter with Lombard initials with oil-based red and in blue ink, with bi-colour (blue/red) printed decorated initials; one capital D on fol. 93r in the copy of the Mainz Psalter in the John Rylands Library in Manchester is inked *à la poupée* in blue (left) and red (right) with red decoration; the same volume has an initial D inked in red placed within red decoration on fol. 81v; more red/red decorated initials are known from this and other copies
- 1457–1470 fragments of six editions of the *Ars Minor* by Aelius Donatus, a schoolbook for learning Latin grammar, with one or more initials inked in blue are printed with the same type as the B42, and a fragment of a seventh *Ars Minor* with a red initial with blue decoration; they are therefore thought to have been published in the period 1457–1470 by Fust and Schöffer, or by Schöffer only if after Fust’s death in 1466
- 1458–1462 letterpress books with metalcut or woodcut illustrations, inked in black in Germany
- 1460 *Catholicon*, Mainz: [Johann Gutenberg?], 1460; the first two lines of the first column on fol. [1]r are printed with red ink in some copies
- 1460–1462 the first two books in letterpress illustrated with metalcut images are produced; the metalcuts are a series of the *Passion of Christ* and the *Seven Delights of Mary*

- 1460–1465      development of the wooden rolling press for intaglio printing engraved copper plates in the Upper-Rhine area
- 1461            Ulrich Boner, *Der Edelstein*, Bamberg: Albrecht Pfister, 14 February 1461; the first letterpress book illustrated with woodcuts; oil-based ink is used for inking the letters and water-based ink for the woodcuts; the letters are printed first, the woodcuts are printed secondly
- 1462            Johann Fust and Peter Schöffer produce a *Latin Bible* with rubrication printed in red throughout, and part of the quires with Lombard initials printed in blue or red; a number of poorly printed blue initials is over-painted in blue; blind embossed, uninked initials are usually over-painted in blue, sometimes in red; the colophon at the end of volume 2 is printed in red and has the Fust and Schöffer printer's device with the branch with two shields with the Greek letters *X* and *A* (*Χριστοῦ Λόγος*, *Christou Logos*, Christ's Word) printed in red
- 1465/67        engraving by Master E.S. of *Mary and Child in a Garden* inked in white and printed on one-sided black-coated white paper
- 1466/67        *Speculum humanae salvationis*, 1st Latin ed. and 1st Dutch ed., with woodcut figures in water-based (now browned) iron gall ink and letterpress text inked in oil-based black ink
- 1470            intaglio printing engraved copper plates with a rolling press in Italy (Florence and Mantua)  
                   – engravings printed monochromatic in blue, brown or green in Italy; monochromatic intaglio prints appear since then continuously  
                   – *Christ in the Winepress*, a German pasteprint printed in purple-red (Schreiber 2813)  
                   black/red letterpress and printer's devices inked in red become standard in German Lands and Italy
- 1470–1475     musical annotation printed in black only; presumably notes and staves were printed separately
- 1471            Adrianus Cartusiensis, *De remediis utriusque fortunae*, Köln: Arnold ter Hoernen, 1471; colophon with printer's device – lettered “a h” for Arnold ter Hoernen – beneath inked in red; this is the first time another printer than Peter Schöffer uses a printer's device

- 1475 *Corpus iuris civilis. Codex Iustinianus*, glossa ordinaria by Franciscus Accursius, ed. Andreas Rumel, Nürnberg: Johann Sensenschmidt, Andreas Frisner, 1475; the only incunabel with red printed underlines
- 1476 Johannes Regiomontanus, *Kalendarium*, Venice: Bernardus pictor de Augusta, Petrus Loslein de Langencen, Erhardus Ratdolt de Augusta, 1476; fol. 1r has woodcut ornamentation inked in black, a capital A in the Latin edition, a capital Q in the Italian edition inked in red, lettering in black, publishers names in red; the first books produced by Erhard Ratdolt's printshop  
 – *Missale Romanum*, Rome: Ulrich Han, 12 October 1476 (*Incipit ordo missalis secundum consuetudinem curie Romane, Roma: Udalricus gallus alias Han Alamannus ex Ingelstat, 1476 die vero xii Octobris*); contains musical notation with red staves of five continuous lines printed from strips of metal over black notes; this red-over-black manner became standard until gradually replaced by broken staff lines printed from type, see under **1508**  
 – *Buch der Astronomie*, Cologne: Nicolaus Götz, [c.1476]; with a lunar quadrant printed from an engraved copperplate inked in red in some copies, in black in others; with a lunar volvelle made of a base plate and two dials, the base plate and dials printed from engraved copperplates inked in black or red in various colour combinations; the plates are presumably printed by rubbing and not by press
- 1477–1486 Erhard Ratdolt produces books with elaborate ornamental woodcut borders inked in red or black on their respective first pages
- 1478 *ca.* Aelius Donatus, *Ars minor*. Additional: Cato [vulgo *Disticha Catonis*], [Venice]: [Nicolas Jenson], [c.1478]; Jenson worked separately from Ratdolt from 1477; he used the same kind of decorated border, and also printed in red.
- 1480 *Agenda Moguntinensis*, Mainz: [Johann Numeister], 1480; with black/red metalcut initials in the text and a large metalcut plate depicting a St Martin with three black/red printed coats of arms; comparable in technique to Schöffer's blue/red initials
- 1481 Ramón Llull, *Ars brevis*, Barcelona: Pedro Posa, Peter Brun, 1481; contains a circular diagram made up of curved metal strips and letterpress inked in red, yellow and blue over-printed in register with explanatory text in black below

- 1482 Johannes Regiomontanus, *Calendarium*, Venice: Erhard Ratdolt, 1482; contains diagrams of lunar eclipses printed in register from two interdependent woodblocks inked in black and red
- Euclides, *Elementa*, Venice: Erhard Ratdolt, 1482; with additional dedication in seven copies in letterpress with goldleaf pressed to sticky binding medium
  - Philippus de Rotingo (ed.), *Missale Romanum*, 2nd ed., Venice: Octavianus Scotus, 28 November 1482; contains musical notation with four-line staves inked in red over notes in black; the first edition of August 1482 has the musical annotation in black only
- 1485 Johannes de Sacrobosco, *Sphaericum opusculum*, Venice: Erhard Ratdolt, 1485; with series of diagrams of lunar eclipses printed in register from two interdependent woodblocks inked in black and red, or black and yellow respectively; with a larger diagram of a lunar eclipse printed from a woodcut inked in black, the impression over-printed with two other woodcuts in yellow and red for the colour planes respectively
- *Breviarium Augustanum*, Venice: Erhard Ratdolt, 1485; with the design of a coat of arms printed from a woodcut inked in black, the impression over-printed with two other woodcuts in yellow and red for the colour planes respectively
- 1486 Juliana Berner, ‘Boke of blasynge of armys’, in *Boke of Hawking, Hunting, and Heraldry*, St Albans: Schoolmaster Printer, [not before 1486]; letterpress in black with initials in red and sometimes in blue; coats of arms stamped from woodcuts, presumably covered with fabric, in two colours of various combinations
- 1487 *Obsequiale*, Augsburg: Erhard Ratdolt, 1487; the frontispiece shows the full-figure portrait of Friedrich II von Zollern, bishop of Augsburg, printed from a black keyblock over-printed with three other woodcuts in yellow, green and red for the colour planes; Ratdolt produced a few dozen of similar frontispieces with the black keyblock over-printed with two to four colour blocks
- 1488 Johannes de Thurocz, *Chronica Hungarorum*, [1st ed.], Brünn: Konrad Stahel und Matthias Preinlein, 20 March 1488
- Johannes de Thurocz, *Chronica Hungarorum*, 2nd ed., Augsburg: Erhard Ratdolt, 3 June 1488; two copies with the dedication to King Matthias Hunyadi Corvinus, King of Hungary, printed in gold in the same system as the 1482 Euclides
- 1489 Marsilio Ficino (1433–1499), *De vita libri tres; Apologia; Quod necessaria sit ad vitam securitas*, [S.l.]: Antonio di Bartolomeo Miscomini, 1489; The first four lines on fol. a2r<sup>o</sup> are in a

gold-bronze ink; in the fifth line the syllable 'nus', inked in gold, is slightly out of register compared to the rest of the line which is in black; this means the text was printed in two pulls, one after the other

- 1490 Johannes Crispus de Montibus, *Termini omnium actionum cum arbore*, Venice: Johann Hamann, 1490; with a classification of juridical terms represented as a tree, printed from a woodcut inked in red and with text in black within the 'fruit' hanging from the tree  
– *Psalterium Benedictinum cum canticis et hymnis*, Mainz: Peter Schöffer, 1490; Schöffer's last publication with blue/red printed initials  
– *Livre d'Heurs*, Paris: Jehan de Prie, 1490; with metalcuts printed in colours throughout the volume
- 1491 *Octoechos*, Kraków: Schweipolt Fiol, 1491; church Slavonic: *Осмѣсласникъ* (Osmoglasnik); the first printed *Octoechos*; with red printed decoration, lettering, and initials
- 1492 *Breviarium ordinis praedicatorum sancti Dominici*, Basel: [Jacob Wolff von Pforzheim für Jacob von Kilchen], 1492; red printed decorations similar to the decorations of Schöffers initials, but here only printed in red filled the space within filled with hand-painted blue initials  
– Donatus Bossius, *Chronica Bossiana*, Milano: Antonio Zarotto, 1492; genealogical tree with letterpress within woodcut rectangles inked in red on fol. [1]v; all other text is in black only
- 1493 Zacharias Lilius, *Orbis breviarium*, Florenz: Antonio Miscomini, 1493; the first cartographic colour printing with two schematic world maps and a zone map printed from woodcuts inked in red with black lettering
- 1500 'Hypomnema', in: Ammonius Hermiae, *Commentarius in quinque voces Porphyrii*, Venice: Zacharias Kallierges for Nicolaos Blastos, 1500; fol. 1r with a decorative upper border, text within upper border and a decorated initial M printed with an oil-varnish upon which leafgold is applied, similar to Erhard Ratdolt's gold printing in 1482 and 1488
- 1503–1505 Leonardo da Vinci describes inking a sage leaf with white paint and pressing it onto black coated paper, which is a form of nature printing
- 1505 Konrad Peutinger, *Romanae vetustatis fragmenta*, Augsburg: Erhard Ratdolt, 1505; the trade edition is in black-and-red only; two copies have letterpress in black, gold and red;

Peutinger sends copies in letterpress in gold and silver to Georg (The Bearded) Duke of Saxony and perhaps also to Elector Friedrich III of Saxony, which copies are now lost

- 1507 Lucas Cranach the Elder, court artist to Friedrich II of Saxony, prints a keyblock with a *St George* inked in black and with highlights printed from a second block inked in gold on blue coated paper, possibly together with an equestrian image of Emperor Maximilian I in the same hues or in black and silver; a further impression of the *St George* is in black and white on blue paper
- 1508 Hans Burgkmair, on instigation of Peutinger, prints a keyblock with a *St George* inked in black and with the highlights printed from a second block inked *à la poupée* in gold and silver on white paper, together with an equestrian image of Emperor Maximilian I in black over-printed in gold from a second block on white paper
- 1509 Lucas Cranach the Elder produces three prints that have the keyblocks over-printed with tone blocks with the highlights cut from the blocks inked in yellow ochre; the whole is printed on white paper that therefore creates the third colour
- 1510 Hans Burgkmair creates *Lovers Surprised by Death* by printing three interdependent tone blocks inked in three different hues of the same colour, the white highlights are cut out from the block inked in the lighter hues, the second and third block serve to print the darkest shades, hatching and the lettering  
- Hans Baldung Grien creates *Preparation for the Witches's Sabbath* printed from a keyblock with dark hatching and a tone block with saved highlights
- 1510–1513 Strasburg artists Hans Baldung Grien and Hans Wechtlin create prints in Cranach's way, inking their tone blocks in greyish blue or green.  
- printer/publisher Johann Schott produces books with titlepages printed in Cranach's way
- 1512 Hans Burgkmair creates a portrait of Hans Baumgartner from three blocks that are cut by Jost the Negker from Antwerp
- 1512 *ca.* Hans Burgkmair creates a portrait of *Jacob Fugger*, banker in Augsburg, from a block for the complete portrait with the highlights and background cut out, the hatching for the darker shades is printed from a second block inked in black; in a second state the coat is printed in green

- 1516 Ugo da Carpi is granted a Venetian privilege for his manner of printing *chiaro et scuro* by super-imposing a tone block inked in brown with the highlights cut out over a keyblock for the shading inked in black on 24 July 1516  
– Lucantonio degli Uberti creates a reverse copy of *Preparation for the Witches's Sabbath* by Hans Baldung, its has the highlights cut out of the tone block in the same way
- 1516–1540 Agostino Veneziano, *Madonna and Child Adored by Saints of the Dominican Order*, at least one copy of the engraved copperplate is inked *à la poupée* in blue and red
- 1518–1527 Ugo da Carpi moved to Rome where he develops over-printing three or four blocks in related hues to what become known as *chiaroscuro* prints, for which he receives an additional papal privilege
- 1519–1521 Prints with keyblocks over-printed with five or six colour blocks appear in Germany and Spain, highlights can be cut out from one or two of the colour blocks
- 1530 *ca.* Parmigianino, *Sts Peter and John Healing the Sick at the Gates of the Temple*, c. 1530, combines one woodcut tone block in state I and two new tone blocks inked in grey or greenish browns in state II over-printing an etching inked in black
- 1540–1600 Heyday of Italian *chiaroscuro* printing with experimentation in number of blocks and ink colours
- 1543–1548 Artists of the School of Fontainebleau print etching plates in monochromatic purplish red or red-brown
- 1550 Giorgio Vasari, *Le vite de più eccellenti architetti, pittori, e scultori italiani, da cimabue insino a' tempi nostri*, 1st edn, Florence: Lorenzo Torrentino, 1550, pt. 1, pp. 109–10; first description of the *chiaroscuro* woodcut process
- 1557–1560 Hubert Golz publishes his *Vivae omnium fere imperatorum imagines*, with editions in German and Italian (1557), in French (1559) and in Spanish (1560); the etched designs are printed over two tone blocks originally; later on the darker tone block is left out and the worn lines of the etched plate reworked in engraving, with additional hatching to compensate for the discarded darker tone block; Latin re-ed. 1645, 2nd ed. 1708, this time with all images printed from two newly cut blocks each, but without an intaglio plate

- 1557–1572 Erasmus Loy creates a series of printed *intarsia* leaves, apparently known as *Fladerpapier*, to be used as examples for actual *intarsia* work or stuck to furniture as *faux intarsia*
- 1572 Konrad Saldörffer creates a jigsaw etching plate of which the middle part is inked in red and the surrounding plate in black, the whole printed in one run through the press; the print is used as title plate for a Nicolas de Nicolay, *Von der Schiffart und Rayss in die Türckey unnd gegen Orient*, Nuremberg: Dietrich Gerlatz, 1572; it is thereby the first intaglio colour printed book illustration
- 1593, 1595 Wendel Dieterlin publishes the first two parts of his *Architectura* (Strasbourg: Bernhard Jobin, 1593 and 1595); title plates of this series of etchings are printed from jigsaw-plates; with some copies the inserted parts are inked in red and *à la poupée* in black and red, with the surrounding plate inked in black
- 1615–1630 Hercules Segers inks a number of his plates monochromatically in blue or brown; some plates he inks in white or pale yellow to be printed on black or brown coated paper; he creates two colour prints from two plates printed in register
- 1632–1633 François Perrier creates *chiaroscuro* etchings from two plates inked in black and white respectively and printed in register on grey-brown paper; see under 1645
- 1637 Abraham Bosse and Charles Delafont receive a privilege for over-printing two colour-inked etching plates in register dated 6 January 1637
- 1642 Ludwig von Siegen develops the mezzotint technique
- 1645 Abraham Bosse publishes a manual on etching, in which he also describes Perrier's manner of colour printing, his colour printing privilege of 1637, and inking plates monochromatic in a non-black colour
- 1649 Giovanni Antonio Remondini starts the production of block-printed decorated papers in Bassano
- 1660 Giovanni Benedetto Castiglione creates monochromatic (brown) monotypes

- 1670 *ca.* Jan van de Velde IV creates a *Portrait of an Old Man* from two plates printed in register; the first plate is etched in dust-grain aquatint scraped further like a mezzotint and inked in black; the second plate is a line etching inked in red
- 1683 Joseph Moxon publishes his *Mechanick Exercises: Or, The Doctrine of Handy-works*; pp. 328–30 have the first description of printing text in black and red
- 1685 in the printshop supported by Dutch military engineer and inventor Johannes Teyler intaglio plates are inked *à la poupée* in up to ten colours
- 1688 20 February 1688; Teyler receives a privilege for publishing prints in his colour printing process  
Production of bronze varnished papers and brocade papers starts in Augsburg
- 1695 Amsterdam print publishers Gerard Valck and Petrus Schenck receive a privilege for publishing prints in Teyler's colour printing process on 24 September 1695
- 1710 *ca.* Jacob Christoff Le Blon develops his trichromatic process, over-printing three mezzotint plates inked in blue, yellow and red, in this order
- 1719 Le Blon receives an English royal privilege for his trichromatic process on 5 February 1719; he also introduces a fourth black inked plate and a fifth white inked plate
- 1737 Le Blon receives a French royal privilege for his trichromatic process on 12 November 1737
- 1744–1764 Woodcut print printed in black, pink and other colours (*benizuri-e*) in Japan
- 1756 Publication of *L'art d'imprimer les tableaux*, Le Blon's instructions for trichromatic printing
- 1759 Giles Demarteau inks crayon engravings prepared with a roulette in red-brown; later on he prints crayon engravings from two plates inked in black and red-brown respectively
- 1764 Francesco Bartolozzi introduces inking stipple etched plates in red-brown in England; later on he also has his plates inked *à la poupée* in colours
- 1765 Start of multiple-colour woodcut printing (*nishiki-e* later *ukiyo-e*) in Japan

- 1769 Louis-Marin Bonnet inks a *Tête de Flore* from eight crayon engravings inked in eleven colours, thus with some plates inked *à la poupée* in two colours
- 1772 Jean-François Janinet combines crayon engraving with fine toothed roulettes with Le Blon trichromatic process
- 1787 Samuel Hooper patents the addition of fillers to paper pulp
- 1795 William Blake creates polychromatic monotypes
- 1796–1798 Alois Senefelder develops lithography
- 1797 Alois Senefelder makes his first experiments with lithographic colour printing
- 1800–1840 Change from wooden printing presses to full metal printing presses
- 1801 20 June; Alois Senefelder is granted an English patent for his invention of lithography
- 1803 Alois Senefelder succeeds in lithographic printing on cotton
- 1810 start of the development of full-metal printing presses for any form of printing, followed by the gradual disappearance of wooden printing presses
- 1818/1819 Alois Senefelder publishes his manual on lithography *Vollständiges Lehrbuch der Steindruckerey*, 2nd edition 1821, with translations in French (1818) and English (1819)
- 1822 William Savage publishes his *Practical Hints on Decorative Printing*, with all colour prints printed from multiple woodblocks in up to fourteen colours
- 1827 John George Christ patents making enamelled paper

*A Decade of Change (1830–1840)*

- 1834            26 February; death of Alois Senefelder
- 1834/35        Specimens of rainbow printing published in: Jean Midolle, *Écritures anciennes d'après des manuscrits et les meilleurs ouvrages*, Strasbourg: Simon fils, 1834–1835
- 1835            23 October; George Baxter is granted a 14-year patent for his colour printing process combining an aquatint or mezzotint key plate (rarely a lithograph) in black over-printed with multiple wood engravings inked in colour  
- development of machine grinding of printing ink
- 1837            Moritz Hermann von Jacobi invents electroplating, later developed to creating electrotypes and steelfacing  
– 15 January; the firm of Godefroy Engelmann Father and Son applies for a French patent for lithographic printing in four colours called *Lithocolore*  
– 31 July; the patent is granted as no. 8848 to Godefroy Engelmann Father and Son  
– 22 December; Godefroy Engelmann Father and Son apply for an alteration of the name of their process to *Chromolithographie*, next to other details
- 1838            27 March; the requested name alteration is granted to Godefroy Engelmann Father and Son and the process is since then known as ‘Chromolithography’  
– 29 March; death of Carlo Lasinio, the last to use Le Blon’s trichromatic mezzotint technique
- 1839            25 April; death of Godefroy Engelmann Sr  
– 19 August 1839; the French government has acquired Louis Jacques Mande Daguerre’s patent for the production of Daguerreotypes, the first successful photographic process, and presents it publicly
- 1840            development of the mechanisation of book printing presses and of lithographic presses; attempts at mechanising rolling presses for intaglio printing are not successful until c.1900  
- developing techniques for printing tens of millions of impressions, starting with postage stamps in England