The present exhibition is a historical survey of prints – primarily woodcuts, engravings, and lithographs – used in book illustration from about 1480 to about 1965. It includes notable loans from the USciences Rare Book Collection, which is rich in illustrated herbals and titles related to the practice and history of pharmacy. A highlight of these holdings is *Vegetable materia medica of the United States* (first published in 1818) by renowned 19th-century botanist W.P.C. Barton; the University owns, remarkably, twenty original copper engraving plates used to create the illustrations in this text, two of which are on display here, alongside the hand-colored prints produced from them. Rounding out the selections is a diverse assemblage of more than 60 book illustrations spanning five centuries; most are loans from private collectors, and they mark the first appearance on campus of original graphic art by acknowledged giants of Modernism such as Picasso, Braque, Matisse, Chagall, Gauguin, and Miró.

Prior to the mid fifteenth century, the European concept of ‘book’ consisted of bound manuscripts, laboriously produced by scribes – often monks – and sometimes also illustrated (or ‘illuminated’) in color by artists who specialized in miniature painting. In the 1450s, however, a revolution occurred: the introduction and exploitation of moveable type (already in use for centuries in the East), made famous by Johann Gutenberg, a printer from Mainz, whose typeset and printing processes allowed identical books to be produced in great numbers and more inexpensively than manuscripts. Within a short period books began to be illustrated with woodcuts – the product of a design carved in relief into a block of wood. These printed images appeared alongside or were integrated into the text, and their function was to supplement, clarify, or structure the text. Because both block and type were relief processes (i.e. with a raised printing surface) the woodblock could be made the same thickness as the height of the type, and the printer could generate a page with text and illustration in one step.

Early books, called *incunabula* if published before 1501, were instrumental in the dissemination of religious and profane images, and sometimes their illustrations were crudely hand-colored. (A rare example of this is on display in the present exhibition.) As Europe emerged from the pious Middle Ages, and the tastes of a burgeoning middle class turned increasingly from heavenly to earthly themes, more secular subjects appeared on woodcuts, and over time these rather naive compositions gave way to more sophisticated designs. Herbals, travel books, stories of love and passion, fables and legends, and historical events became popular with the masses.
In Germany, the major print and book centers included Cologne, Ulm, Nuremberg, and Augsburg; the latter is perhaps where the first illustrated Bible was issued, the *Biblia sacra germanica* (c. 1475), printed not in Latin but in the vernacular, or spoken tongue. The publisher Anton Koberger was responsible for one of the greatest publishing ventures of his time, the celebrated folio *Weltchronik* (or *Nuremberg Chronicle*) of 1493: over 1,800 illustrations were provided by skillful repeated use of 646 woodcuts of Old Testament and historical figures, cities, and events, cut by a team of artists headed by Michel Wolgemut, and assisted by his young pupil, the soon-to-be-famous Albrecht Dürer (1471-1528).

In Italy, book presses – many of which were established by itinerant German printers – began springing up in the 1460s, with Venice being the most important center. Reflecting the renewed interest in classical antiquity and humanism, editions of Cicero, Pliny, and Augustine were particularly popular. With its bestiary of freaks and abnormalities, Pliny’s encyclopedic *Natural History* (a 1519 edition of which is on view in the gallery) was responsible for future flights of fancy in many illustrated books of the period. It was in Venice in 1490 that Aldus Manutius founded the first publishing ‘conglomerate’, which produced books of surpassing beauty by engaging the finest scholars of the age and a staff of experienced painters. His *Hypnerotomachia Poliphili*, a monk’s romantic tale of passion, is still considered the ultimate in perfection of printing, illustration, and typographic design. (One of Aldus’s most handsome and readable typefaces, revived in the 20th century and named ‘Bembo’ for the renaissance scholar Pietro Bembo, is still used extensively today; in fact, the text you are reading is in this style.)

It is notable that the great majority of book illustrations – including the herbals and anatomical prints on view – served the needs of an employer or specialized community, and these pictures therefore came into existence as conveyors of information or opinion rather than as expressions of an illustrator’s personality or as works of art. This fact, however, has not precluded modern specialists from designating the finest of these printing and illustrating ventures as artistic *tours de force*. Continued on back page.
Most loose prints in the exhibition are temporary loans from private collectors. All books on display are from the USciences Rare Book Collection (England Library) or the Marvin Samson Center for the History of Pharmacy.

**Prints in Books**

1. Decorated title page with *St. George slaying the dragon*, in Pliny, *Naturae historiarum libri xxxvii*, Venice, 1519


Loose Prints

10.-11. Achilles learning the harp and Paris kills Achilles with an arrow, hand-colored woodcuts from Historie von der Zerstörung Trojas, by Guido de Colonna, Augsburg, 1478-79

12. Woodcuts (cut from the printed page) of eight women, from Jacopo Filippo Foresti da Bergamo, De mulieribus claris, Ferrara, 1497.

13. Crucifixion of Jesus, woodcut, from Rosario della gloriosa vergine Maria, by Father Alberto da Castello, Venice, 1521


15.-16. Two narrative woodcuts, from Ludovico Ariosto, Orlando furioso, Venice, 1562

17. A view of the ruins [sic] of Palmyra alias, engraving, from Miscellanea curiosa: containing a collection of some of the principal phaenomena in nature accounted for by the greatest philosophers of this age …., London, 3 vols, 2nd ed., 1708

18. Bird nest, engraving from De Bononiensi scientiarium et artium instituto atque academia commentarii, Bologna, c. 1745-47

19.-20. Human muscular and skeletal systems, two engravings, from Dictionnaire universel de medicine, Paris, 6 vols, 1746-48
21. Carious sculls [sic] infected with the venereal disease, engraving created by Grignion and printed by C. Cooke, London, c. 1788, pl. 1 (On loan from the collection of Peter Paone)


25.-27. Three botanical engravings (Imperatoria angustifolia, Crepis praecox, and Amaranthus prostrates) from Mémoires de l’Académie des sciences, littératures et beaux-arts de Turin, Turin, 1803, 1804, and 1806, respectively

28. Samuel A. Allen and Thomas R. Holland (printers), Poor Richard illustrated; lessons for the young and old … by Benjamin Franklin, Boston, 1859


46.-47. Paul Gauguin, two woodcuts for the book project Noa Noa (Fragrance, Fragrance): Auti Te Pape (Women at the River) and Te Po (The Night), designed 1893-94 [illustrated]

48. James McNeill Whistler, The Smith’s yard, transfer lithograph, from The International Studio, vol. 1, no. 1, March 1897

49. Henri Matisse, Odysseus blinding Polyphemus, lithograph on colored paper, from James Joyce, Ulysses, New York, 1935

50. Joan Miró, figure with a star, lithograph from Tristan Tzara, Parler Seul, Paris, 1948-50 [illustrated]

52. Joan Miró, book front cover, lithograph, from Jacques Prévert and Georges Ribemont-Dessaignes, Joan Miró, Paris 1956


55. Joan Miró, book front cover, lithograph, from James Johnson Sweeney, Atmósfera Miró, Barcelona, 1959


58. Georges Braque, vase of flowers with a black frame, lithograph from Braque lithographe, preface by F. Ponge, catalogue by F. Mourlot, Monte Carlo, 1963

59. Pablo Picasso, two heads (dated 4 February 1963), lithograph from Pablo, lithographe IV, by Fernand Mourlot, Paris, 1964

60. Joan Miró, abstract composition, lithograph from José Pierre and José Corredor-Matheos, Céramiques de Miró et Artigas, Paris, 1974
The art of engraving or incising into metal dates to antiquity, but the idea of using engraved plates to create prints can be traced to goldsmiths in fifteenth-century Germany. Various prominent German and Italian renaissance artists produced designs for woodcuts and engravings, among which Dürer is perhaps best known. (It is still hotly debated whether or not Dürer cut some of his own blocks before the guild of formcutters had become officially entrenched in 1498, and before increasingly large commissions made professional help necessary.) The additional example of Florentine painter Sandro Botticelli (1445-1510) – best known for his *Primavera* and *Birth of Venus* – who designed engraved illustrations for a 1481 edition of Dante’s *Inferno*, demonstrates that major Renaissance painters (with no loss to their egos) were commonly engaged in creating designs for the so-called ‘minor’ arts such as metalwork, ceramics, and books. By the early seventeenth century engraving had ousted woodcut as the preferred method of book illustration in Europe.

Writing, nearly seventy years ago, about the social importance of print techniques, William Ivins, Jr, Curator of Prints of the Metropolitan Museum of Art, observed:

*It can be reasonably argued that the great event of the fifteenth century was not the rediscovery of Greek or any other sort of ancient learning, but the discovery of mechanical ways to make pictorial records in duplicate, exactly, cheaply, and in vast quantities. This discovery made it possible for the first time to make pictorial statements and records in exact duplicates and to distribute them in invariant visual form simultaneously to many different people in many different places. The importance of this to human society can hardly be overstated. It has possibly had greater effects than any mechanical discovery since the invention of writing, as it is basic not only to our knowledge of the past and the present, but to a very large number of our modern technological and scientific developments.*


One could persuadingly argue that from the time of their invention the electric photocopier, printer, personal computer, and the internet have had a greater and more pervasive effect on the dissemination of knowledge and images than traditional printmaking methods; but for the 500 or so years leading up to those landmark developments, and in an ever-increasing visual culture, the print reigned supreme, for it brought to life the worlds of ideas and imagination presented in a wide variety of scientific, literary, and artistic texts.

Michael J. Brody  
*Director and Curator, Marvin Samson Center for the History of Pharmacy*

**Acknowledgments**  
For their assistance in the preparation of this exhibition I wish to thank Marvin Samson, Suzanne Murphy, Corrado Minimo, Peter Paone, Charles Myers, Dan Flanagan, Matthew Sloane, and various staff in the Facilities, Marketing and e-Marketing, Library, and Public Safety Departments at USciences.

**Front cover:** see Checklist no. 4