

Illustrated Natural History

The rise of printing and the inception of early modern natural history coincided in fundamental ways, as amply suggested by the works brought together in this exhibition. This essay is concerned with a key area of overlap between the two practices—namely, visualization and illustration. Sixteenth- and seventeenth-century botanical images, anatomical treatises, and maps demonstrate the centrality of visual information in the pursuit of knowledge about the natural world. Early modern natural history was profoundly dependent on and generative of images, many of them replicable by way of print. Prints, like drawings, could enable identification and, in turn, use or classification of what they represented. Those engaged in medical study, for example, which involved the twin disciplines of botany and anatomy, encouraged the production of images for study and for medical use—pharmaceutical in the case of plants and pathological in the case of bodies. The case of botany is exemplary. The early modern era is often considered synonymous with the “Botanical Renaissance,” an efflorescence of projects and products whose chronology and lines of descent have been amply charted. This renaissance gained momentum toward the end of the fifteenth century, when printed illustrated works took over from manuscript production. During the first half of the sixteenth century the so-called “fathers of German botany” Otto Brunfels, Hieronymus Bock, and Leonhart Fuchs published volumes that consolidated a new mode of studying the plant world, characterized by, among other things, an amplified naturalism in the often copious illustrations that accompanied their texts (see cats. 26 and 27). After midcentury, the lineage moved west and the three “fathers of Netherlandish botany”—Rembert Dodoens, Carolus Clusius, and Lobelius—oversaw a subsequent chapter in the history of illustrated botany (see cats. 40 and 42).¹

Botanical treatises played a key role in the scholarly experience of the natural world in early modern Europe. Enterprising publishers produced herbals that encompassed classical sources and included specimens from the New World, catalogued and illustrated alongside local indigenous European plants that had not been described by such classical luminaries as

the Greek naturalists Theophrastus, Dioscorides, and Galen, and the Roman natural philosopher Pliny the elder. Numerous plant varieties not accounted for by these classical authors were “discovered” by European medical professionals or natural historians and compounded a growing body of botanical knowledge that was disseminated, emended, and perpetuated in print. Alongside published works, unpublished treatises—consisting of images alone or a combination of text and images—also attest to how natural historians made sense of the plant world. Natural history treatises (published and unpublished) were repositories of information gathered by reading and observing, and through correspondence and discussion among scholars of the natural world. The improvements early modern authorities made over their classical predecessors resulted from an ongoing process of revision, a process that was as much a factor of the production of these treatises (in print) as it was of their reception and use. In many respects, the fathers of early modern botany themselves set the terms according to which their works have come to be studied and celebrated. Fuchs’s *History of Plants* (cat. 27) was published in 1542, followed a year later by a German edition, the *New Kreüterbuch*.² In the lengthy descriptive title of the 1542 edition, Fuchs proudly heralds the novelty of a book so replete with images: “Remarkable Commentaries on the History of Plants, produced at great expense and with utmost vigilance, to which are added more than five hundred lifelike images of plants, expressed as never before, imitated from the life and very artfully rendered.” The title of the subsequent German edition also calls attention to its illustrations: “New Herbal, in which not only the entire history, which is to say the names, form, location and schedule of growth, nature, power, and effect of the better part of the plants that grow in Germany and in other lands is described with the utmost effort, but also the roots, stalks, leaves, flowers, seeds, fruits, and in summa the entire gestalt of all of these is specifically and artfully represented and portrayed as well—such as has never before been seen or brought to light.”³

The Latin edition of Fuchs’s herbal numbers 896 pages and 512 woodcuts. The German edition is less bulky, at 680 pages, and contains six additional woodcuts. Both editions famously feature portraits of Fuchs himself and of the three artists who produced the woodcuts: Heinrich Füllmaurer, the draftsman; Albert Meyer, who transferred the forms of the drawing to a woodblock; and Veit Rudolph Speckle, the block cutter.⁴ These three men, shown in the process of recording the flowers in the vase before them, represent the professionalization of image production as well as the division of labor according to which scientific works were authored by medical professionals and illustrated by artisans. The separate, full-length portrait of Fuchs holding a botanical specimen that graces these volumes calls attention to the author-investigator and emphasizes his direct access to and observation of nature.

Such pictures as filled Fuchs’s texts and the tradition of their production are often discussed in light of the divide between art and science. But, as Sachiko Kusakawa has suggested, this limits the interpretive horizon.⁵ Scholars have tended to observe that, in keeping with broader art-historical developments, the images over the course of time shed the schematism characteristic of late fifteenth-century woodcuts and manifest an increasing naturalism and accuracy; whereas the texts, from the perspective of Linnaean botany, are a mire of names and properties. In other words, the images are judged according to the criteria of the fine arts and ranked by their degree of naturalism, while the texts are viewed as scientific documents lacking in taxonomic ambition. This disjunction between the naturalism—or modernity—of the pictures and the archaism of the texts informs numerous accounts of early modern illustrated botany.⁶ Texts such as Fuchs’s, which arranges its contents in alphabetical order, do not instantiate a systematic taxonomy. By the lights of Fuchs’s own text and others like it, however, the inclusion of so many new and lifelike images was key to the volumes’ scientific value.

Within the discipline of art history, a fairly consistent argument has been made, first by Erwin Panofsky, that “the rise of those particular branches of natural science which may be called observational or descriptive—zoology, botany, paleontology, several aspects of physics

and, first and foremost, anatomy—was . . . directly predicated upon the rise of the representational techniques.”⁷ The central line of argument in many accounts holds that early modern science benefited from Renaissance techniques of and interest in naturalism.⁸ By contrast, William Ivins maintains that print technology furthered scientific progress not because of the naturalism of the images it disseminated but because printed images are multiple and identical. The processes by which these images were disseminated, gathered, and compared amounted to scientific disciplines: the development of modern sciences, technologies, archaeologies, and ethnologies depended on “exactly repeatable pictorial or visual statements.”⁹ In contrast to a long line of studies that consider advances in early modern botanical illustration a close cousin of developments in the fine arts, this view offers a more epistemologically and socio-historically grounded model of how pictures helped to manufacture science.

Why did the fathers of early modern botany go to such lengths and expense to illustrate their published works? Perhaps because naturalistic images of plants closed the gap between textual knowledge of nature and the experience of it. In the early modern period, the practice of medicine came to depend increasingly on empirical evidence, on eyewitness and firsthand experience of the natural world. As a renowned doctor and professor of medicine, Fuchs would have been keenly aware of these developments in his discipline.¹⁰ In the realm of anatomy, Andreas Vesalius exemplifies the critical shift in mode of instruction (see cat. 30). Formerly, it had involved a triangulated practice, in which a professor (who presided *ex cathedra*), a demonstrator, and an *ostensor* together performed anatomical dissections; in Vesalius’s hands, these various functions were carried out by the anatomist alone. Teaching was a function of observation. Similarly, botanical study came to involve direct sensory study of its objects. Simples (the makings of medicines) were gathered for and by professors of medicine and their students and were cultivated in the gardens newly attached to universities; specimens of the plants and their properties were demonstrated in the course of lectures. Given the new emphasis on direct sensory observation (*autopsia*), the ample illustrations that figure in so many botanical (and, indeed, anatomical) publications could well be explained as by-products of new functional demands within the sciences.

Although historical accounts of early modern botany have favored treatises that are illustrated, Euricius Cordus’s unillustrated *Botanologicon* offers insight into the function of illustrations. Published in Cologne in 1534, the *Botanologicon* describes how medical botany was practiced. Much of the text is an account of a botanical expedition, focusing on the close observation of plants and the particular form of attention “good botany” should cultivate. The author is sharply critical of both arrogant medical doctors and unlearned medical practitioners, whose shared faults derive from their inattention and deficient observational skills. And the *Botanologicon* contains a number of references both explicit and implicit to the use of images in the practice of botany—a suitable means, we may infer, to address the problems Cordus identifies.¹¹ The text, a colloquy among the author and four fellow medical students, is distinct in structure and voice from the writings of Brunfels and Fuchs, but it addresses their work both by name and in subtler ways.

The colloquy begins at Cordus’s home, where the team of friends prepares to set out to “botanize.” Cordus notes that he will follow his “usual practice, just as if none of you were here, and take along a book or two. I take great pleasure in going into the countryside, and in comparing all sorts of herbs and plants that grow in various locales and about which I have read at home, with the images stored in my memory and observing them; and sometimes I am able to ask their properties or their names from the old wives I meet along the way. On this basis—after comparing all of them with their descriptions—I am the better able to judge them clearly and come to as accurate a conclusion as possible about them.”¹²

“Botanizing” or “herborizing,” a crucial procedure for sixteenth-century naturalists, was practiced in botanical gardens and with herbaria (collections of dried plants). At its

heart lay the autoptic experience of nature, along with the process of learning by collating one's experience with one's prior knowledge—and with images.¹³ The books Cordus refers to would likely have been editions of classical texts on the plant world, which he compared with his observations of fresh herbs, images of plants, and information gleaned from those who plied their trade in the woods and fields (women herbalists, shepherds, and others) to identify the specimens he encountered.¹⁴ In the production of knowledge of the natural world and the practice of distinguishing its elements and their properties, images such as were featured in so many publications of the time would have been essential. Indeed, Cordus and his friends take along a “Dioscorides minor” and two volumes of Brunfels—likely the first two volumes of Otto Brunfels's *Herbarum vivae icones* (cat. 26), published in Strasbourg in 1530–36.

Cordus cites illustrated books in his description of botanizing, but he also speaks of drawing on images stored in his memory. It is worth considering the role of images within cognition, as construed by Aristotle and his scholastic followers in particular, and how such conceptions informed the use of images in early modern botany. According to Aristotelian theories, nothing can be understood unless it is presented to the mind as an image. Well into the early modern period, natural historians, artists, poets, and others elaborated on Aristotle's declaration that “the soul never thinks without an image [*phantasm*].”¹⁵ Images, which were food for the internal senses of intellection, cognition, judgment, and memory, were constituted of data received by the external senses. (The faculties of mind involved in these processes are mapped out in Dürer's woodcut for the Ludovicus Pruthenus volume [cat. 8].) Their function in the mediation of cognition may offer a critical key to the presence of so many images in early modern botany—and, more generally, natural history.

The impetus to illustrate natural history in this period and the market for illustrated natural history certainly have much to do with the new technical means of reproduction. For example, the commercial success of Fuchs's herbal led the Flemish publisher Jan van der Loë to solicit a compatriot, Rembert Dodoens, to produce a Flemish version. As many as two-thirds of the 700 woodcuts in Dodoens's *Cruydeboeck* (Book of plants; 1554) were copied directly from Fuchs's images. Subsequently, the great Antwerp publisher Christophe Plantin purchased Van der Loë's stock of woodcuts in 1581 and reused them in a variety of publications. The durability of woodblocks and the repetition of subject matter made it possible for printed natural history works to encompass so many illustrations. But a market or mechanical explanation for the encyclopedic publications laden with pictures that are hallmarks of early modern natural history may not account for the claims made for the images themselves.

That Dodoens's *Cruydeboeck* depended as heavily as it did on Fuchs's work did not prevent the Flemish author (and his publisher) from asserting that the woodcuts contained in the text were accurate depictions, made “from the life” or “naer dat leven.” This claim was commonly made for more and less plausibly truthful depictions of natural historical subject matter. In a dedicatory epistle to his *Herbarum vivae icones*, Brunfels wrote, for example, that his sole aim was “to bring to life a science almost extinct. And this has seemed to me to be in no other way possible than by thrusting aside all the old herbals, and publishing new and really life-like images, and along with them accurate descriptions extracted from ancient and trustworthy authors.”¹⁶

The inclusion of lifelike images, or images made from the life, was touted in the title of nearly every illustrated natural historical publication of this era. Just as frequently, the great effort and expense involved in the production of such depictions was also mentioned. The emphasis on verisimilitude sometimes coincided awkwardly with claims for the artistry of the images. The plants represented in Brunfels's herbal are praised as being “summa cum diligentia et artificio effigiatiae” (depicted with the utmost diligence and artfulness). Fuchs specified in his lengthy subtitle that “shading and other less crucial things with which painters sometimes strive for artistic glory” have been discouraged in the interest of making

“the pictures correspond [more] to the truth.” The artificiality of depiction in linear form of three-dimensional specimens had to be carefully managed to support durable claims for the veracity of the images. On the one hand, the inclusion in Fuchs’s volume of the portraits of the men responsible for its vast array of images attests to a deep concern with demonstrating the professional qualifications of pictures produced for natural historical use. On the other, Fuchs is compelled to demonstrate that he has kept the artistry of these very men in check, in the interest of the truthfulness of their depictions.

The oscillation between claims for the artistry of images and emphatic references to their truthfulness is remarkable. Fuchs is one of several authors who responded to Pliny and Galen’s condemnation of images as unreliable and incapable of representing change over time (crucial for the identification of plants). Fuchs reminds his readers of a principle introduced by the Roman poet Horace, namely that (as per Fuchs) “those things that are presented to the eyes and depicted on panels or paper become fixed more firmly in the mind than those that are described in bare words.” Images served as essential supplements to texts, for Fuchs as for Cordus, and permitted identification across languages at a time when natural history was insistently morphological in its orientation. At the same time, however, the printed images under discussion here are linear, static, two-dimensional renderings of colorful, mutable, three-dimensional entities. No amount of artifice can close the gap between such a depiction and its referent.

Near the middle of the seventeenth century, René Descartes made a surprising statement about the veracity of printed images. In the context of a discussion of mental images and the extent to which they do not resemble their objects, he observed:

[T]he perfection of an image often depends on its not resembling its objects as much as it might. You can see this in the case of engravings: consisting simply of a little ink placed here and there on a piece of paper, they represent to us forests, towns, people, and even battles and storms; and although they make us think of countless different qualities in these objects, it is only in respect of shape that there is any real resemblance. And even this resemblance is very imperfect, since engravings represent to us bodies of varying relief and depth on a surface which is entirely flat. Moreover, in accordance with the rules of perspective they often represent circles by ovals better than by other circles, squares by rhombuses better than by other squares, and similarly for other shapes. Thus it often happens that in order to be more perfect as an image and to represent an object better, an engraving ought not to resemble it.¹⁷

The syntax of prints, whether intaglio or relief, is conventional rather than natural. The individual lines of an engraving or woodcut do not generally or necessarily correspond to the forms represented, but taken together and distilled by vision resolve into a recognizable effect. The individual linear patterns representing butterfly wings and owl and other bird feathers in Adriaen Collaert’s compilation of specimens in a page of his *Avium vivae icones* (cat. 45), for example, suggest or echo the patterns and forms themselves without resembling them line for line. This schematism carries through to the overall composition, a highly symmetrical and entirely implausible gathering of winged creatures. The ability to recombine and recompose also pertains to other artistic media, of course. But in the case of natural historical representations, prints tend to be more conventional and constructed, while drawings display more effort to represent by resemblance. Consider, for example, the delicate ink drawing by Jacques de Gheyn II of a dragonfly in three views (cat. 44). The beady head, segmented body, and transparent veined wings are rendered in minute detail, with each of the three views repeating the process of observing the individual forms. Differences in form are marked by differences in the pressure of pen on paper, and resulting variations in the

amount of ink are relegated to the various parts of the creature. The three views correspond to the process of visual inspection or observation, sequential and cumulative. By and large, prints of natural historical specimens present a single, consolidated view (perhaps derived from a study sheet such as this) that does not purport to convey optical truth in the same way a drawing can.¹⁸

To varying degrees, early modern natural history prints and drawings represent the fruits of observation. Printed natural historical images served as records of observation, often abstracted from the actual process. They did so not by dint of optical truth, as per Descartes. If, on the one hand, printed images could serve the cognitive processes cited by Cordus—because they were, broadly speaking, naturalistic—on the other hand, they were made highly legible by their schematism. Given that delicate balance, the availability of verisimilar, replicable illustrations enabled the pursuit of natural history, a set of practices conjoined by commitments to observation, description, and morphology.

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1. See Arber, *Herbals*; Stearn, *The Art of Botanical Illustration*; Bridson and Wendel, *Printmaking in the Service of Botany*; and Landau and Parshall, *The Renaissance Print*, esp. “Printed Herbals and Descriptive Botany,” 245–59. See also my “The Uses of Realism in Early Modern Botany,” in Givens et al., *Visualizing Medieval Medicine*, 239–49.
2. See Fuchs, *The Great Herbal of Leonhart Fuchs*, and Baumann et al., *Die Kräuterbuch-Handschrift des Leonhart Fuchs*.
3. Fuchs’s personal copy of the *New Kreüterbuch* (today in the Municipal Library of Ulm) is reproduced in Fuchs, *The New Herbal of 1543*.
4. See Landau and Parshall, *The Renaissance Print*, 253–55. James Ackerman suggests that Fuchs “allowed or encouraged” the three illustrators to include their self-portraits “in compensation” for restraining “the urge . . . to express themselves at the cost of accuracy”; see his “Early Renaissance Naturalism and Scientific Illustration” (1985) reprinted in *Distance Points: Essays in Theory and Renaissance Art and Architecture* (Cambridge, MA: MIT Press, 1991), 185–207, at 200. On the division of labor, see Karen Meier Reeds, “Leonardo da Vinci and Botanical Illustration: Nature Prints, Drawings, and Woodcuts circa 1500,” in Givens et al., *Visualizing Medieval Medicine*, 205–37.
5. See Sachiko Kusakawa, “Illustrating Nature,” in Frasca-Spada and Jardine, *Books and the Sciences in History*, 90–113.
6. See, for example, Anderson, *An Illustrated History of the Herbals*, 121–29, on Brunfels’s herbal. For a very frequently cited argument based on the relative naturalism of medieval herbal illustrations as an indication of scientific knowledge, see Singer, “The Herbal in Antiquity,” and Pächt, “Early Italian Nature Studies.” A compelling recent account of verbal and visual description of plants is Givens, *Observation and Image-Making in Gothic Art*, 82–105.
7. Panofsky, “Artist, Scientist, Genius,” 140.
8. See, for example, Ackerman, “Early Renaissance Naturalism,” and Martin Kemp, “‘The Mark of Truth’: Looking and Learning in Some Anatomical Illustrations from the Renaissance and Eighteenth Century,” in Bynum and Porter, *Medicine and the Five Senses*, 85–121.
9. Ivins, *Prints and Visual Communication*, 3. Compare “Printed Herbals and Descriptive Botany,” in Landau and Parshall, *The Renaissance Print*, 245–49.
10. For a brief chronology of Fuchs’s career, see Arber, *Herbals*, 4. Karen Meier Reeds and Andrew Cunningham, writing about early modern botany and anatomy respectively, describe the connections between the humanist culture devoted to the revival of classical texts in the sixteenth century and the new practices of observation and demonstration: Reeds, *Botany in Medieval and Renaissance Universities*; Cunningham, *The Anatomical Renaissance*.
11. Peter Dilg, *Das Botanologicon des Euricius Cordus: Ein Beitrag zur botanischen Literatur des Humanismus* (Marburg: Erich Mauersberger, 1969), 147.
12. *Botanologicon*, 26–27; adapted from Dilg, *Das Botanologicon*, 147; compare Greene, *Landmarks of Botanical History*, 1: 366–67.
13. See Ogilvie, *The Science of Describing*, esp. chap. 4, 139–208.
14. For further discussion of learning botany from books and botanizing, see Reeds, *Botany in Medieval and Renaissance Universities*, esp. chap. 4.
15. Aristotle, *The Complete Works of Aristotle*, ed. Jonathan Barnes, 2 vols. (Princeton: Princeton University Press, 1995), 685 (*De anima*, book 3, section 7, col. 431). See *inter alia* my “Eyes Wide Shut.”
16. Transl. in Greene, *Landmarks*, 244.
17. Charles Adam and Paul Tannery, eds., *Oeuvres de Descartes* (Paris: L. Cerf, 1897–), 12 vols., 6: 113; *The Philosophical Writings of Descartes*, ed. J. Cottingham, R. Stoothoff, and D. Murdoch (Cambridge: Cambridge University Press, 1984–1991), 3 vols., 1: 165–66. See also Brian Baigrie, *Picturing Knowledge*, esp. 122–23.
18. See also Daniel Arasse, “Art et science: Fonctions de dessin chez Léonard de Vinci,” in Krüger and Nova, *Imagination und Wirklichkeit: Zum Verhältnis von mentalen und realen Bildern in der Kunst der frühen Neuzeit*, 71–80.

Rembert Dodoens

Netherlandish, 1517–1585

and Pieter van der Borch I

Netherlandish, 1545–1608

*Rosa Sativa**Iris**African Marigold*in Dodoens, *Florum, et coronariarum odoratarumque nonnullarum herbarum historia*

(History of flowers and of several kinds of plants used for fragrant garlands), Antwerp: Christophe Plantin, 1568

Book with hand-colored woodcuts, 16.2 × 12 × 5 cm

New Hollstein Herbarium 7 (Van der Borch)

Library of the Arnold Arboretum, Harvard University, Ka D66f 1568 c.2 (1)

Addressed to both a scholarly and a growing popular audience, Dodoens's *Florum* presents decorative and fragrant flowers as objects of botanical investigation. The clean lines, uncluttered design, and reduced scale of its woodcuts are typical of the botanical images produced in Christophe Plantin's Antwerp publishing house by the artist Pieter van der Borch.¹ Their verisimilitude was inspired by German botanists of the previous generation, who, spurred by the humanist interest in correlating classical authority with the realities of the natural world, collaborated with artists to produce herbals densely illustrated with images made from life.²

In its portable octavo format, the *Florum* both replicated and enabled the sort of firsthand experience of nature that informed its production.³ While purporting to transcribe physical reality, this hand-colored woodcut of the *Rosa sativa* uses pictorial conventions to evoke the specimen's dynamic presence, thus serving the needs of botanists and amateurs alike.⁴ By focusing on morphological characteristics that differentiate closely related plant species, the image is meant to aid identification as well as cognition and memory.⁵ Visual information is spread legibly across the page, and two stems are cropped at left to prevent overlapping lines. The stems emerge from the roots in a carefully posed equidistant array. Echoing the three-quarter turn common in contemporaneous portraits, this arrangement produces the effect of the plant turning dynamically in space. The display of three blossoms from various angles and three buds in varying states of openness suggests the difficulty of capturing a mutable, living thing in two dimensions and the necessity of studying a plant over the course of its development.

Dodoens, who was a physician as well as a botanist and classical scholar, rejected the alphabetical organization of earlier herbals by classifying plants according to their basic morphology, utility to humans, and role in domestic economy: his other botanical treatises concern grains, medicinal plants, and viniculture. The *Florum* reflects the contemporary interest in flowers as curiosities, as well as the growing importance of private and university gardens throughout northern Europe.⁶ These gardens functioned as laboratories of nature, where the rapidly expanding world could be condensed into its living botanical representatives and studied at leisure. The inextricability of botanical inquiry and aesthetic pleasure in the garden—and in Dodoens's book—is

founded on natural theology, the belief that the beauty and variety of nature are an expression of God's design. The hand-coloring in this copy of the *Florum* made it labor intensive to produce and expensive to buy, but added to its usefulness and its visual appeal.⁷ Like gardens, such hand-colored herbals were simultaneously producers of natural knowledge, precious objects meant for aesthetic pleasure, and commodities that demonstrated the wealth and sophistication of their owners.

◀ AMW ▶

1. Van der Borch was one of Plantin's most productive designers. He worked with the woodblock cutters Gerard Janssen van Kampen and Arnaud Nicolai on this volume. See Ger Luijten, ed., "Peeter van der Borch and the Illustration of Plants," in *The New Hollstein: Dutch & Flemish Etchings, Engravings, and Woodcuts 1450–1700*, vol. 14, pt. 6, pp. 75–77; Carl Depauw, "Peeter van der Borch: The Artist as *Inventor* or *Creator* of Botanical Illustrations?" in Nave and Imhof, *Botany in the Low Countries*, 47–56.

2. See, for example, Landau and Parshall, *The Renaissance Print*, 245–59; Kusukawa, "Leonhart Fuchs on the Importance of Pictures"; Pamela H. Smith, "Artisanal Knowledge and the Representation of Nature in Sixteenth-Century Germany," in O'Malley and Meyers, *The Art of Natural History*, 15–31.

3. See Swan, "The Uses of Realism," 239–49.

4. See Wood, "Curious Pictures."

5. See Ogilvie, *The Science of Describing*, esp. chap. 4, 139–208.

6. Swan, "The Uses of Botanical Treatises," esp. 65–67. See also G. De Buysscher and W. de Backer, "Renaissance Garden Design in the Low Countries in the Light of the Officina Plantiniana's Publications," in Nave and Imhof, *Botany in the Low Countries*, 61–63.

7. See Agnes Arber, "The Colouring of Sixteenth-Century Herbals," in her *Herbals*, 315–18.



Rosa Sativa



Iris



African Marigold

Adriaen Collaert

Netherlandish, c. 1560–1618

Rose

Iris

African Marigold

from the series *Florilegium* (Collected images of flowers), Antwerp: Philip Galle, c. 1587–89

Engravings, sheets: 17.6 × 12.6 cm, 17.7 × 12.5 cm, 17.8 × 12.6 cm

New Hollstein 1565, 1579, 1582

Rijksmuseum, Amsterdam, RP-R-BI-5993, 6007, 6010

Consisting largely of flower images borrowed from herbals by Rembert Dodoens, Mathias Lobelius, and Carolus Clusius, this engraved *Florilegium* adapts the tradition of naturalistic botanical woodcuts to a new medium and function. Published by Philip Galle in Antwerp, Adriaen Collaert's series comprises twenty-one loose engravings preceded by three introductory sheets: a title page with dedication to Giovanni de' Medici; an image of the resurrected Christ offering a bouquet to Mary Magdalene in a Renaissance garden; and a large vase of flowers resting alone on a table.¹ Each subsequent page presents numerous flowers, roughly divided by species, strewn almost haphazardly without explanatory text or adherence to a common scale.

The right side of the first flower plate, shown here, contains roses copied in reverse from the image of the *Rosa sativa* in Dodoens's 1568 *Florum* (cat. 40). Exemplifying his treatment of such source material throughout the series, here Collaert removes the roots and dissects the original depiction of the complete plant into discrete blossoms that float on the page. In so doing, he transfers the claims to authority of woodcuts made "ad vivum" to a new purpose.² These strewn surfaces, which resemble the leaves of the sketchbooks already used in many painting studios, may have been intended as models for artists, tools for building compositions like those introducing the *Florilegium* itself. Placed at the beginning of the series, these images shift its emphasis from the proto-scientific observation of flowers to their artistic, allegorical, and religious significance.³

The *Florilegium* may have been produced for Giovanni de' Medici during his stay in the Netherlands between 1587 and 1589, as testimony to his patronage of the arts and specifically of the Florentine Accademia del Disegno.⁴ Such a date would explain Collaert's reliance on Netherlandish herbals recently published in Antwerp by Christophe Plantin as well as the absence of the kinds of exotic flowers that became popular toward the end of the century. The link with the Medici is supported by "quotations" of the *Florilegium* in subsequent Italian paintings and by its presence in the inventories of contemporary Florentine collections. This group of images, then, would have served as a link between the traditions of botanical images in the Netherlands and in Florence and contributed to the development of the still life in both artistic centers.⁵ If published as early as 1589, it would mark the birth of the engraved florilegia that proliferated in northern Europe in the early seventeenth century and the demise of the botanical woodcut tradition epitomized by Plantin's publications. Later engraved and etched florilegia

by Pierre Vallet, Crispijn van de Passe, and Emanuel Sweert served as model and coloring books, portable galleries, or advertisements for the sale of bulbs—vehicles through which flowers became prized ornamental commodities and independent artistic subjects.⁶

◀ AMW ▶

1. For background on Adriaen Collaert and Galle, see the introductory essay in Marjolein Leesberg and Arnout Balis, eds., *The Collaert Dynasty*, in *The New Hollstein: Dutch & Flemish Etchings, Engravings and Woodcuts, 1450–1700*, vol. 16, part 1, pp. xxxix–xcvii. The garden in the second introductory sheet recalls the work of Jan Vredeman de Vries, the foremost garden designer in the North in this period. See Hellerstedt, *Gardens of Earthly Delight*.

2. See Swan, "Ad vivum"; Parshall, "Imago Contrafacta."

3. For instance, roses are symbolic of Christ's Passion. On illusionistically rendered naturalia and the "strewn" surface in illuminated manuscripts, see Kaufmann and Kaufmann, "The Sanctification of Nature."

4. Wązbinski, "Adrian Collaert."

5. See Brenninkmeyer-De Rooij and Ekkart, *Roots of Seventeenth-Century Flower Painting*.

6. See Ogilvie, *The Science of Describing*, 202–5.



Rose



Iris



African Marigold