Unpacking the Printed *Wunderkammer*: Matthäus Merian's *Florilegium Renovatum et Auctum* (1641)

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The Swiss printmaker Matthäus Merian's (1593-1650) flower book, the *Florilegium Renovatum et Auctum*, offers a unique visualization of a garden *wunderkammer* that is multivalent in its ability to generate numerous meanings through pictures instead of text.[1] The word "*florilegium*" generally refers to a book form featuring "a collection or a selection of flowers."[2] Printed in a variety of editions in German or Latin, Merian's volume is an updated and amplified edition of its predecessor, the *Florilegium Novum*, issued by the printmaker's father-in-law, the Franco-Flemish engraver Johann Theodor de Bry (1561-1623).[3] However, unlike the 1612 *Florilegium,* which features only engravings of plants, Merian's 1641 flower book illustrates several major aspects of seventeenth-century gardens and gardening with over 170 plates.

Copies of Merian's *Florilegium* vary greatly, but an ideal version would consist of seven parts.[4] The frontispiece (Figure 1) and the title page provide the publication information of the 1641 *Florilegium*. A two-part introduction further explains the reason for reissuing the book and its contents as well as identifying the Frankfurt Burgomaster, Johannes Schwindt (1580-1648), and his crucial role in its publication.[5] A garden spread (Figure 2) engraved by Merian shows the

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1 See German version in Johann Theodor de Bry and Matthäus Merian, *Florilegium renovatum et auctum: das ist: Vernewertes und vermehrtes Blumenbuch: von mancherlen Gewächsen, Blumen uñ Pflantzen, welche uns deren Schönheit, lieblicher Geruch, Gebrauch, und manigfaltiger Unterschied angenehme machet, die nicht allein auss der von uns bekandter, sondern auch den alten unbekandter Welt, fruchtbaren Schoss, uns herfür gegeben werden: die hierinnen auffs zierlichste und fleissigste, dem Leben nach, so viel als möglich gewesen, in Kupffer gebracht, und mit ihren Stengeln, Blettern, Blumen, Samen, Hülsen, Zwibeln, und Wurtzeln, derer Liebhabern für Augen gestellt zufinden: bey derer jedem Stück, sein eygentlicher rechter Namen, aber umb der Gewissheit, und sicherer Erkandtnuss willen, nur in Latinischer Sprach gesetzet* (Frankfurt am Main: Ben Matthaüs Merian Buchhändlern, 1641); Latin version in Johann Theodor de Bry and Matthäus Merian, *Florilegium renovatum et auctum: variorum maximeque rariorum germinum, florum ac plantarum, quas pulchritudo, fragrantia, usus, varietas, differentia commendat, & non tantùm noster hic, sed & adversus veteribusque ignotus Orbis è foecundo suo procreat gremio, eicones elegantissimae, summa cum diligentia ad vivum ... expositae: additis eorum proprijs, veris ac genuinis nominibus* (Frankfurt am Main, 1641).

2 The Latin term *florilegium*, plural *florilegia*, is equivalent to the Greek word *anthologia* (anthology). In the seventeenth century, the term acquired the meaning of "a collection or a selection of flowers." See Ann M. Blair, *Too Much to Know: Managing Scholarly Information before the Modern Age* (New Haven, CT: Yale University Press, 2010), 124-25.

3 Johann Theodor de Bry, *Florilegium novum, Hoc est: Variorum Maximeque Rariorum Florum ac Plantarum singularium unà cum suis radicibus & cepis, Eicones diligenter in aere sculptae & ad vivum ut-plurimum expressae. New Blumbuch Darinnen allerhand schöne Blumen und frembde Gewächs / mit ihren Wurtzeln und Zwiebeln / mehrertheils dem Leben nach in Kupffer fleissig gestochen / zu sehen seynd* (Oppenheim, 1612).

4 The "ideal version" is a hypothetical volume I put together to include all the sections and plates I could find based on my close examinations of a few individuals in several institutions through both online resources and in person visitations. Each copy of the 1641 *Florilegium* in major libraries and museums varies in numbers of plates and sometimes sections of contents. Printers often issued images in *florilegia* as individual sheets, and the buyer was under no obligation to buy all the plates, nor to have the plates bound in any specific order. This might have resulted in the variations of the plate numbers. There are a few important books or catalogues that give descriptions or background information to Merian's volume. See Wilfrid Blunt and William T. Stern, *The Art of Botanical Illustration* (1950; repr., Suffolk: ACC Art Books, 2015), 100; Lucia Tongiorgi Tomasi, *An Oak Spring Flora: Flower Illustration from the Fifteenth Century to the Present Time—A Selection of the Rare Books, Manuscripts and Works of Art in the Collection of Rachel Lambert Mellon* (Upperville, VA: Oak Spring Garden Library, 1997), 73-78; Claus Nissen, *Die botanische Buchillustration: Ihre Geschichte und Bibliographie* (1951; repr., Mansfield, CT: Maurizio Martino Publisher, 1994), 75-76; and Jane Quinby, comp., *Catalogue of Botanical Books in the Collection of Rachel McMasters Miller Hunt* (Pittsburgh, PA: The Hunt Botanical Library, 1958), 1:253-55.

5 There is very little documentation about the Burgomaster. The Schwindt family migrated from Basel and brought prosperity to Frankfurt through the spice, grain and wine trade. After he became a citizen, Schwindt was active in city business from 1623 until his death in 1648. He was a learned scholar who traveled to France, England, Holland, and Italy. Most important of all, he constructed a famous, although small, garden on Eschenheimer Gasse in the city of Frankfurt from 1628 to 1641. His magnificent garden survived the chaos and devastation of the Thirty Years' War and bloomed until the first half of the eighteenth century. See Otto Derreth, *Gärten im alten Frankfurt* (Frankfurt am Main: Kramer, 1976), 32; and Hannelore Limberg, "'SEHT DIES GASTLICHE HAUS, RINGSUM DAS WASSER DER QUELLE' / Von der Großen Oed zum Holzhausenschlösschen / Die Metamorphose eines patrizischen Anwesens und sein Funktionswandel im geschichtlichen, gesellschaftlichen und topografischen Kontext" (PhD diss., Johann Wolfgang Goethe University, 2012), 185.

size, scale, and complexity of Schwindt's garden. Next follow eight pages of parterre designs (Figure 3) in ichnographic views, accompanied by Latin inscriptions. A page of garden appliances (Figure 4)—a garden shovel, a metal transplanter, and a square shovel—shows the needed tools for transporting plants in the garden. Five illustrations (Figure 5) suggest methods to display flowers by assembling bouquets by pairing flowers with opulent vases or tying them into a bundle. Lastly, 162 illustrations present the ornamental and fragrant flowers (Figure 6) from the Old and the New Worlds that were typically collected in the seventeenth century.

The images in the 1641 *Florilegium* prompt learning in several fields. The conversations Merian's volume could generate depend on many variables. The rest of the items within the collections and the educational and cultural backgrounds of the readers affect how they would interpret or associate with the volume.[6] For example, the flower book maps the plant kingdom worldwide, which ties closely to global trade and colonization.[7] Once the significance of rare and exotic plants shifted from their utilitarian purpose for medicine to their pecuniary worth as material goods, the bulb and seed business became an industry for global trades.[8] The imported plants from different parts of the world indicate the expansion of Western colonialism. They show which lands the powerful European countries had conquered or established as trade ports. For instance, the print of the sunflowers (Figure 6) is a product of the discovery of America. If early modern Europeans did not open an ocean route to South America, they would not have seen the plant in Peru, let alone imported and commoditized the species into a largely collected item.[9] In the seventeenth century, rich merchants were among the collectors who were fascinated by the idea of the *wunderkammer*, a collection of objects displayed in a meaningful manner to allow discussions and contemplations of knowledge.[10] To them, the *florilegium* publications would not only have been books of flowers, but books of the charted territory and a map of economic activity.[11] This could be especially true if the 1641 *Florilegium* was part of a collection of world cartography, sea charts, globes, and books on America. Working in tandem, the objects paint a picture of the most up-to-date knowledge of the New World in areas such as humanity, geography, economy, and natural history.

Within the scope of continental history, the plant portraits in Merian's 1641 *Florilegium* project and preserve the botanical knowledge that had reached a plateau with *herbal* publishing in the sixteenth century. Engravings in printed *florilegia* are renowned for their lifelike portrayals of their subjects. However, many of the plant depictions are more conventional, following the *herbal* tradition instead of observational.[12] During the first half of the sixteenth century, *herbal* publishing flourished and brought the world a wealth of new understanding of botany based on actual experience and direct inspection of plants in their natural habitat.[13] Botanists from Germany, Italy, and the Low Countries published many *herbals* with the latest "scientific" style, working from life rather than pattern-like depictions from sources of the ancient world.[14] When printers started to produce engraved *florilegia* in the second half of the sixteenth century, *herbals*

6 An attempt to list all the potential discourses surrounding Merian's volume would not be feasible. This section offers a few readings to situate Merian's volume within seventeenth-century thinking and demonstrates how versatile the 1641 *Florilegium* is to contribute to issues in many fields. The fluid nature of Merian's book is not an isolated case in early modern Europe. Commerce, art, and science were complementary and inseparable. For example, botany was not yet its own discipline in science; it often merged with medical practice and gardening. Both academic and private gardens collected the same species of flowers, but valued them for different reasons. Botanists were also collectors of curiosities, and often vice versa. As a result, it is reasonable that the 1641 *Florilegium*, a book ostensibly produced for a commercial and decorative purpose, could also evoke profound discourses in the academic realm. See Mark A. Meadow and Bruce Robertson, eds., *The First Treatise on Museums: Samuel Quiccheberg's Inscriptiones, 1565* (Los Angeles: The Getty Research Institute, 2013), 32-33; Jan C. Westerhoff, "A World of Signs: Baroque Pansemioticism, the Polyhistor and the Early Modern Wunderkammer," *Journal of the History of Ideas* 62, no. 4 (2001): 642; Eric Jorink and Bart Ramakers, "Undivided Territory. 'Art' and 'Science' in the Early Modern Netherlands," *Nederlands Kunsthistorisch Jaarboek* 61 (2011): 9; and Claudia Swan, *The Clutius Botanical Watercolors, Plants and Flowers of the Renaissance* (New York: Harry N. Abrams, Inc., 1998), 9 and 12.

7 Gill Saunders, *Picturing Plants: An Analytical History of Botanical Illustration* (1995; repr., Chicago: KWS Publishers, 2009), 7.

8 Andrew Gebhardt, *Holland Flowering: How the Dutch Flower Industry Conquered the World* (Amsterdam: Amsterdam University Press, 2014), 66-67.

9 Anna Pavord, *The Naming of Names: The Search for Order in the World of Plants* (New York: Bloomsbury Publishing, 2005), 310.

10 *Rooms of Wonder: From Wunderkammer to Museum, 1599-1899,* exhibition catalogue, ed. Florence Fearrington (New York: The Grolier Club, 2012), 9; Meadow and Robertson, *First Treatise on Museums*, vi.

11 Pamela H. Smith and Paula Findlen, "Commerce and the Representation of Nature in Art and Science," in *Merchants & Marvels: Commerce, Science and Art in Early Modern Europe*, ed. Pamela H. Smith and Paula Findlen (London and New York: Routledge, 2002), 97.

12 An *herbal* is "a book containing the names and descriptions of herbs, or of plants in general, with their properties and virtues." The lack of plant information in the *florilegium* separates it from the *herbal*. In a stricter definition, an *herbal* contains plants with medicinal properties and serves as a medical tool. See Wilfrid Blunt and Sandra Raphael, *The Illustrated Herbal* (New York: Thames and Hudson, Inc. / Metropolitan Museum of Art, 1979), 10-11.

13 *Prints and the Pursuit of Knowledge in Early Modern Europe*, exhibition catalogue, ed. Susan Dackerman (Cambridge, MA / New Haven, CT: Harvard Art Museums / Yale University Press, 2011),186; Lucia Tongiorgi Tomasi, "European Medieval and Renaissance Herbals," in *Flora Illustrata*, ed. Susan M. Fraser and Vanessa Bezemer Sellers (New York / New Haven, CT: The New York Botanical Garden / Yale University Press, 2014), 45.

14 Pamela H. Smith, "Artisanal Knowledge and the Representation of Nature in Sixteenth-Century Germany," in *The Art of Natural History: Illustrated Treatises and Botanical Paintings, 1400-1850*, ed. Therese O'Malley and Amy R. W. Meyers (Washington, DC: National Gallery of Art, 2008), 15.

became a visual index for artists to consult for their interpretations of rare plants. For example, Adrian Collaert's first engraved *Florilegium* shows many similarities to the woodcut illustrations in the *herbals* the Flemish botanist Rembert Dodoens compiled.[15] Collaert's rose engraving (Figure 7) imitates the composition and minutiae of the same plant in Dodoens' *herbals* (Figure 8).[16] As Collaert's *Florilegium* became the major influence for the successors in flower book publishing, many seventeenth-century *florilegia* makers, including De Bry and Merian, would replicate Collaert's designs.[17] The comparable details and styles of the plant portraits in the 1641 *Florilegium* pictorially link Merian's book to the botanical knowledge of the time, especially if a collector obtained sixteenth-century *herbals* as part of the library holdings.

The 1641 *Florilegium* also emphasizes the Italian culture in northern Europe. The frontispiece (Figure 1), eight parterre designs (Figure 3), five flower displays (Figure 5), and eighteen botanical illustrations in the volume are direct copies, with slight alterations, from the horticulture book *De Florum Cultura Libri IV*, written by Italian Jesuit Giovanni Battista Ferrari (1584-1655).[18] Even the very first image of the book, Merian's frontispiece after Ferrari's engraving, manifests a strong Italianate orientation of the flower book. The complete volume of Ferrari's treatise, with both texts and images, was not published in Amsterdam until 1646.[19] Before then, to acquire a copy of Ferrari's book most likely required a trip to Rome. Therefore, Merian's plates after Ferrari's designs were then the most available source for the Jesuit's illustrations between 1641 and 1646. Conventionally, the frontispieces of printed *florilegia* feature an architectural structure, often a *loggia*, which looks into a garden or a paradise, as in the case of De Bry's *Florilegium Novum* (Figure 9).[20] The composition is usually symmetrical. The frontispiece of the 1641 *Florilegium*, on the other hand, depicts Flora and her assistants engaging in gardening activities. Even though an architectural feature still exists, there is no longer an entrance directing the readers' eyes into a garden. Instead, the viewers are in the same space as Flora and her assistants. Merian's frontispiece sets a very different expectation for his readers. In addition, Merian reinforced the connection to Italy in the introduction when he praised Schwindt as an intellect who had journeyed long distances to many locations, including Rome. The reason Merian copied so many plates from Ferrari's publication might not have purely been for their artistic achievements.[21] Upon his trip to Italy, Johannes Schwindt might have brought back a copy of Ferrari's book or other horticultural and gardening knowledge to the north.

The Italian aspect of the book is prominently displayed in Schwindt's garden design. Although modern garden history books often categorize Schwindt's garden as German Baroque, its design philosophy is, in fact, closer to the Italian Renaissance Garden.[22] The basic features of a Renaissance Garden include a rectangular plan, an interest in antiquity, and the secularization of the symbolic and allegorical design of the cloister garden.[23] In Schwindt's garden, the walls that enclose the space define the elongated plane of the garden. Within the garden, the parterres and the orchard divide the plane into smaller rectangles. The statues of Hercules and Hermes and the obelisks echo the interest in antiquity and pay homage to the Belvedere Courtyard.[24] The quadrangular division of the parterres and the fountains reflect the adaptation of a cloister garden layout into a Renaissance Garden. Even the pergolas and latticework are typical features of an Italian Garden.[25] Schwindt's garden is a celebration of the Italian-Renaissance ideals. By drawing a strong visual resemblance to Ferrari's book through direct copy of the plates, Merian's *Florilegium* attests to the Italian embodiment of the Burgomaster's Garden.

The section of parterre designs, also Ferrari's original works, further strengthens the Italian association in Schwindt's garden and the 1641 *Florilegium*. By 1641, the formal parterre was a major element for most European gardens. Other than creating the splendid effect to impress visitors, the parterre is also a practical method to separate flowers of different colors if a gardener used plant beds

15 Adrian Collaert, *Florilegium ab Hadriano Collaert caelatum, et à Philip Galleo editum. illustriss. eccelentissimoque dno D. Ioanni Medici. omnis generis elegantiarum admiratori et patrono, Philip. Galleaus DD.* (Antwerp: P. Galleo, *c.* 1587-1589).

16 *Prints and the Pursuit of Knowledge*, 196.

17 Saunders, *Picturing Plants*, 54.

18 Giovanni Battista Ferrari, *Io. Bapt. Ferrarii Senensis E Societate Iesu de Florum Cultura libri IV* (Rome: Stephanus Paulinus, 1633).

19 Giovanni Battista Ferrari, *Flora, seu De Florum Cultura libri IV*, ed. B. Rottendorf (Amsterdam: Joannem J'Ansson, 1646).

20 Vera Kaden, *The Illustration of Plants & Gardens, 1500-1850* (London: Victoria and Albert Museum, 1982), 14.

21 Tongiorgi Tomasi, *An Oak Spring Flora*, 121.

22 Seventeenth-century German gardens were all Italianate in nature since there was no indigenous style. Some garden literature categorizes Schwindt's garden as a German Baroque Garden because the timeframe for the construction corresponds to the Baroque movement. However, Schwindt's design philosophy for his garden is much closer to the Italian Renaissance Garden. See Ehrenfried Kluckert, *European Garden Design from Classical Antiquity to the Present Day* (Cologne: Könemann, 2000), 8; Lucia Impelluso, *Gardens in Art*, trans. Stephen Sartarelli (Los Angeles: The J. Paul Getty Museum, 2007), 12.

23 Impelluso, *Gardens in Art,* 12; Penelope Hobhouse, *Gardening Through the Ages: An Illustrated History of Plants and Their Influence on Garden Styles—from Ancient Egypt to the Present Day* (New York: Simon & Schuster, 1992), 113 and 138.

24 David R. Coffin, *Gardens and Gardening in Papal Rome* (Princeton, NJ: Princeton University Press, 1991), 20 and 90.

25 Ibid., 178.

instead of gravel to form the designs.[26] There were multiple styles to incorporate other than the Italian inspired geometric parterres in Schwindt's garden. As early as the year 1600, French garden designer Olivier de Serres (1539-1619) introduced six curvilinear parterre designs (Figure 10) by his contemporary Claude Mollet (1564-1649) in his horticulture treatise.[27] The *parterre de broderie,* the elaborate embroidery patterns imitating oriental rugs invented by De Serres and his contemporaries, sought to outdo the Italian style with its design and was the dominant style for Formal Gardens from the second half of the seventeenth century to the beginning of the Landscape Garden movement.[28] When Schwindt constructed his garden, he most likely would have seen both of the styles through a couple of sources. Ferrari advocated in his treatise to avoid the oriental rug design, indicating that the Jesuit must have been aware of the French preference of the curvilinear quality, and subsequently introduced it to his readers such as Schwindt.[29] The usage of the geometric parterres, with local addition to put saplings around the corners and inside the center of the pattern, speaks for the Frankfurt Burgomaster's preference for the Italian tradition. The 1641 *Florilegium* thus presents itself as a virtual *wunderkammer* that champions Italian garden culture.

The 1641 *Florilegium* as a pictorial *wunderkammer* brings a unique function to the category of the flower book. *Florilegia* are more like picture books rather than treatises; they aimed to give pleasure to the garden lovers and perhaps also to serve as a guide for identifying different kinds of plants in the seventeenth century.[30] Other than simply being a picture book, a *florilegium* can also serve multiple roles such as a pattern book, a nursery catalogue, a collection catalogue of a garden, or as a record of horticultural information.[31] In Merian's volume, the added garden spread connects the book to the specific site of the garden of Schwindt, which was renowned for its rare and exotic flowers. The botanical collection in the city garden of Schwindt shares many characteristics and includes items that would appear in the early modern concept of the *wunderkammer*.

Understanding the early modern culture of collecting marvels is pivotal to read the 1641 *Florilegium* as a virtual cabinet of curiosities.[32] From the second half of the sixteenth century and onward, European merchants who traveled around the world brought back exotic goods, including crafts, live animals, and plants from the Mediterranean rim and the Americas.[33] Collectors, including royalty, bishops, aristocracy, merchants, and people with independent incomes, purchased anything of cultural and monetary value from these imported goods.[34] Flowers became especially popular because they were relatively easy and affordable to collect. One bulb or seed could grow into many of the same species and the cost to keep them alive was much more economic than herding animals.[35] Nonetheless, contemporary commentators still subsumed rare plants under the term "curiosities."[36]

The impulse to acquire plants and other curiosities led to new systems to organize a chaotic assemblage of random articles, and early modern garden designs often incorporated these new ideas. For example, the Italian philosopher Giulio Camillo (*c.* 1480-1544) proposed the *theatrum mundi* in 1550 as a means to store all the existing knowledge of his time through visual images.[37] Camillo's *memory theater* utilized the ancient idea of the world as a theater to organize information and referred extensively to Roman gods and authors. Early modern gardens amplified the notion of "theater" in the *theatrum mundi*. The garden became an epitome of the world on stage and the visitors became the spectators and actors.[38] Mechanical grandeur in combination with garden designs recreated the *memory theater* in the most sumptuous fashion.

The concept of the *wunderkammer* expands on the

26 Ibid., 207-8.

27 Olivier De Serres, *Le Theatre d'Agriculture et Mesnage des Champs* (Paris: Jamet Mettayer, 1600).

28 Chandra Mukerji, "Reading and Writing with Nature: Social Claims and the French Formal Garden," *Theory and Society* 19, no. 6 (1990): 662.

29 Coffin, *Gardens and Gardening in Papal Rome,* 175.

30 *Florilegia* usually include very little text. In many examples, text only appears in the introductory section(s), stating a possession or ownership of the plants instead of an argument, and in the captions for the illustrations. Saunders, *Picturing Plants*, 41; and Ella B. Schaap, *Dutch Floral Tiles in the Golden Age and Their Botanical Prints* (Haarlem: Uitgeverij J.H. Gottmer / H.J.W. Becht BV, 1994), 21.

31 Blunt and Stern, *Art of Botanical Illustration,* 99-100; Saunders, *Picturing Plants,* 44; Klaus Walter Littger, *The Garden at Eichstätt: Basilius Besler's Book of Plants, a Selection of the Best Plates* (Cologne: Taschen, 2001), 18-19.

32 Sixteenth century collecting culture cuts across all disciplines and subjects. Collecting plants was part of the fascination of marvels, and, therefore, the literature referred to here concentrates on this particular aspect of curiosities.

33 Saunders, *Picturing Plants,* 44; Joy Kenseth, "The Age of the Marvelous: An Introduction," in *The Age of the Marvelous*, exhibition catalogue, ed. Joy Kenseth (Hanover, NH: Hood Museum of Art, Dartmouth College, 1991), 25.

34 Smith and Findlen, "Commerce and the Representation of Nature in Art and Science," 299.

35 *Plants of the New World: The First 150 Years; An Exhibition of some Books which made known the New World to Europe*, exhibition catalogue, ed. Elizabeth A. Shaw (Cambridge, MA: Harvard College Library, 1992), 14.

36 Saunders, *Picturing Plants*, 44.

37 Giulio Camillo, *L'Idea del Theatro dell'Eccellen. M. Giulio Camillo* (Florence, 1550); Douglas Radcliff-Umstead, "Giulio Camillo's Emblems of Memory," *Yale French Studies* 47, *Image and Symbol in the Renaissance* (1972): 47.

38 John Dixon Hunt, *Garden and Grove: The Italian Renaissance Garden in the English Imagination, 1600-1750* (Philadelphia: University of

notion of Camillo's *memory theater*, but focused more on Christian-centered values and the collecting of marvels.[39] In 1565, the Flemish physician Samuel Quiccheberg (1529-1567) published his *Inscriptiones,* a treatise to systematically investigate how to organize and display items in a collection in a meaningful manner.[40] Quiccheberg states that a *wunderkammer* can be more than a space for entertainment and political showcase; in addition, it can be a research and learning center.[41] Using the immense collection of Duke Albrecht V of Bavaria as a model, Quiccheberg established five classes of object, each with more specific criteria for constructing a *wunderkammer*. They are religious subjects in all kinds of representations, three-dimensional objects that demonstrate human artifice and artistry, items from the natural world, tools and instruments, and two-dimensional artifacts.[42] The goal of the five classes, along with an accompanying library, is to map the universe. Despite Quiccheberg's effort to find orders and provide useful guidelines for collectors to assemble their encyclopedic cabinets, the taxonomy of *wunderkammern* in Europe was extremely diverse and fluid.[43] However, putting aside collectors' different interests, the general preferences remained the same, desiring anything that falls into the description of *naturalia* (natural object), *artificialia* (artifact), *exotica* (exotic object), and *rarity*.[44] Similar to the inclusion of the *theatrum mundi* in their designs, early modern gardens often incorporated curiosity cabinets, most commonly in the form of the *gallerie* to house natural history objects.[45] Many of the first botanical gardens, such as the institutional ones at the universities, had museums adjacent to the plant beds.[46] Emerging out of the same marvel collecting culture, Schwindt's garden shows similar interest in collecting marvels, but with a more concentrated paradigm of a garden *wunderkammer* on one type of curiosity, the rare and exotic plants. The materiality of flowers turned the Burgomaster's botanical collection into marvels and his garden into a *wunderkammer*.[47]

Compiled to visualize Schwindt's cabinet of curiosities, the 1641 *Florilegium* thus captures many of the *wunderkammer* qualities within its pages. To recognize the curiosity cabinet characteristics, Quiccheberg's five classes provide a useful template to demonstrate how Merian's arrangement corresponds to the collecting culture of the sixteenth and seventeenth centuries. First of all, the garden print (Figure 2) marks the boundary of the stage on which Schwindt built his epitome of the flora of the world. The garden print depicts a four-part parterre near the entrance surrounded by the sapling displays from the garden's *orangerie*, an orchard in the middle section marked by the colossal statues of Hercules and Hermes and the obelisks, and another four-part parterre at the end of the garden. The layout is a visualization of God's creation, and thus qualifies as an item belonging to the first class.[48] Also included in Quiccheberg's first class is chorography, which covers maps, city views, and descriptions of regions. The garden print is similar to a city view—an imaginary city scape that consists of flowers, trees, and sculptures instead of buildings—and therefore could classify as the first class. On the subject of class two, there are many three-dimensional objects in the garden for this category that also fit the characteristics of the *artificialia*. The sculptures of Hercules and Hermes, the obelisks, and the fountains are all part of this class. It is unclear if Schwindt's sculptures were authentic artworks from antiquity or if they were early modern productions with ancient motifs. Regardless, they preserve the iconography and knowledge of antiquity and establish a connection to the culture and history of Rome.[49] Schwindt's botanical collection (Figure 6), the large quantity of illustrations by different artists in the book, is a direct reflection of the third class of Quiccheberg's theory. Not portrayed individually, but also part of the third class, are the saplings in the *orangerie* and the small trees in the orchard shown in the garden print. All of these rare and exotic natural organisms from around the world cover the *naturalia*, *exotica*, and *rarity* and comprise the largest component of Schwindt's outdoor *wunderkammer*. Merian

Pennsylvania Press, 1996), 67-68.

39 Meadow and Robertson, *First Treatise on Museums,* 34-35.

40 Samuel Quiccheberg, *Inscriptiones vel Tituli theatri amplissimi, complectentis rerum universitatis singulas materias et imagines eximias, ut idem recte quoq[ue] dici possit: Prompituarium artificiosarum miraculosarumq[ue] rerum ac omnis rari tthesauri et pretiosae supellectilis, structurae atq[ue] picturae. Quae hic simul in theatro conquiri consuluntur, ut eorum frequenti inspectione tractationéq[ue], singularis aliqua rerum cognitio et prudentia admiranda, citò, facilè ac tutò comparari possit* (Monaco: Adami Berg, 1565).

41 Meadow and Robertson, *First Treatise on Museums,* 5.

42 Ibid., 14; Horst Bredekamp, *The Lure of Antiquity and the Cult of the Machine: The Kunstkammer and the Evolution of Nature, Art, and Technology* (Princeton, NJ: Markus Wiener Publishers, 1995), 28-29.

43 Patrick Mauriès, *Cabinets of Curiosities* (London: Thames & Hudson, 2002), 50-51.

44 Saunders, *Picturing Plants,* 44.

45 John Dixon Hunt, *A World of Gardens* (London: Reaktion Books, 2012), 134.

46 Michel Conan, *Baroque Garden Cultures: Emulation, Sublimation, Subversion* (Washington, DC: Dumbarton Oaks Research Library and Collection, 2005), 108.

47 Gardens with rare flowers were associated with museums of curiosities in the seventeenth century. Georgina Masson, "Italian Flower Collector's Gardens in Seventeenth Century Italy," in *The Italian Garden*, ed. David R. Coffin (Washington, DC: Dumbarton Oaks Research Library and Collection, 1972), 68.

48 In the second part of the introduction, Merian described how wonderful the flowers and plants were as God created them for the world, which ascribes a religious context to the plants.

49 Bredekamp, The Lure of Antiquity and the Cult of the Machine, 14–15.

also included depictions of the fourth class. The pages of vases and bouquets (Figure 5) along with the spread of the flower transporting equipment (Figure 4) showcase the tools and instruments used to furnish the garden with beautiful display. Lastly, each botanical print signifies the fifth class of two-dimensional artifacts. The 1641 *Florilegium* is, therefore, a visualization of Schwindt's garden as a *wunderkammer*, a virtual room of wonders, as well as a priced treasure to be included in a collection.

When Merian reissued De Bry's *Florilegium Novum* in 1641, he made a significant decision to enrich the content of the book. By incorporating the plates from Ferrari's horticulture book and engraving the view of Schwindt's famous Frankfurt garden, Merian came upon a new function for a flower book. His 1641 *Florilegium* reflects the common pastime of collecting rare plants as marvels and becomes a comprehensive picture book to document a cultural phenomenon: the garden as an outdoor *wunderkammer*. The volume works as a virtual garden and cabinet of curiosities, facilitating learning of different fields for its readers. The *Florilegium Renovatum et Auctum* brings the indoor and the outdoor *wunderkammer* together and contributes to a greater opportunity to promote learning without being constrained to a limited time and place. The book is, thus, a truly useful tool for the pursuit of knowledge in the age of collecting.

Savannah College of Art and Design

Figure 1. Matthäus Merian, Frontispiece from *Florilegium Renovatum et Auctum*, 1641, engraving, 30.1 x 20 cm. Heidelberg University Library.

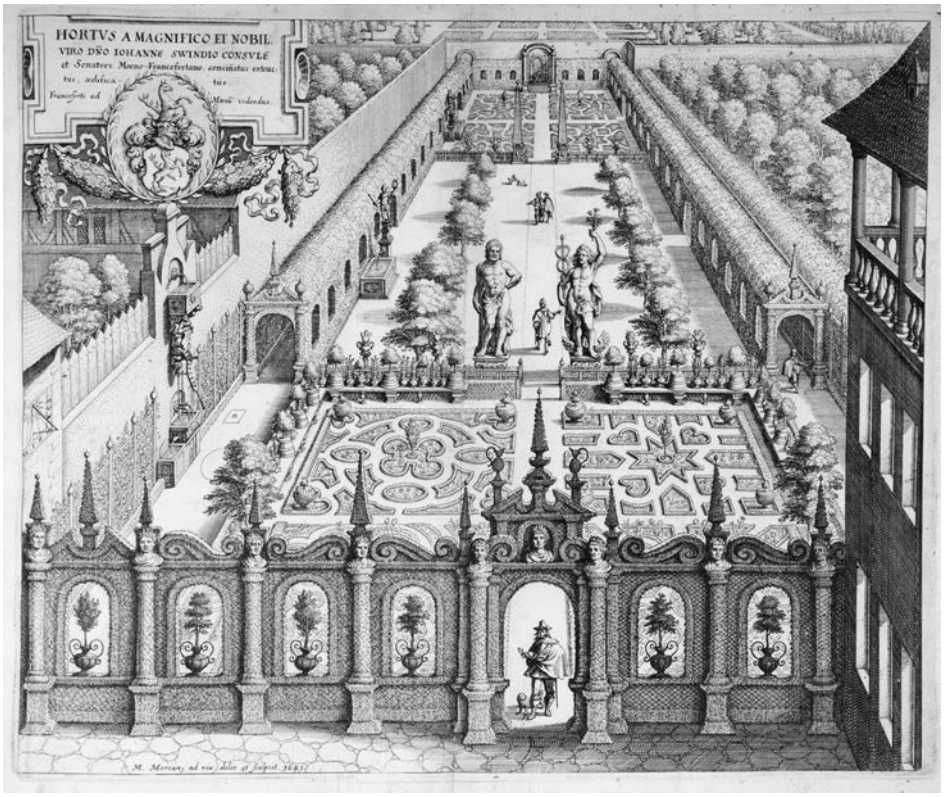


Figure 2. Matthäus Merian, Layout of the garden of Johannes Schwindt from *Florilegium Renovatum et Auctum*, 1641, engraving, 30.1 x 40 cm. The LuEsther T. Mertz Library of The New York Botanical Garden.

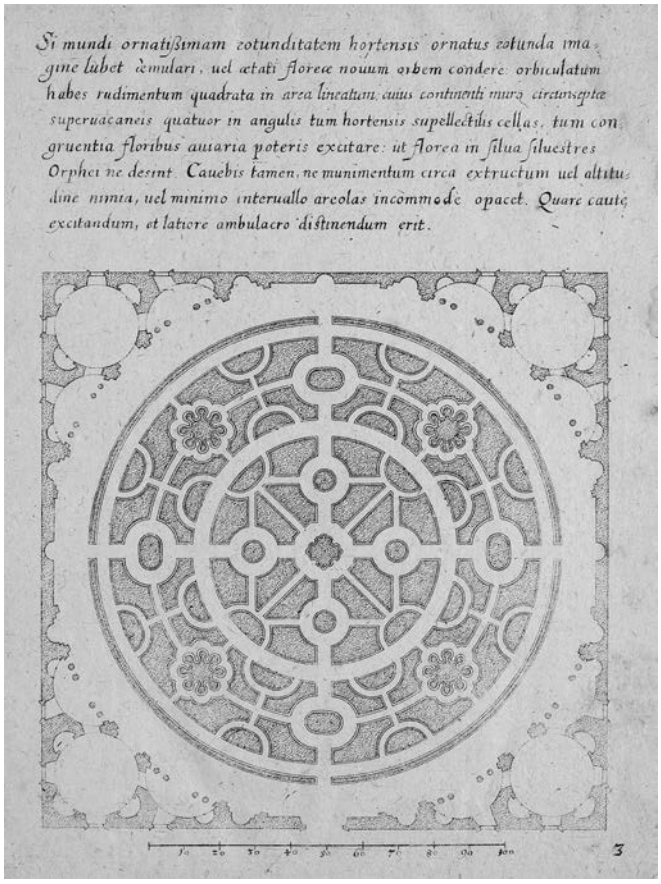


Figure 3. Matthäus Merian, Parterre design from *Florilegium Renovatum et Auctum*, 1641, engraving, 30.1 x 20 cm. Heidelberg University Library.

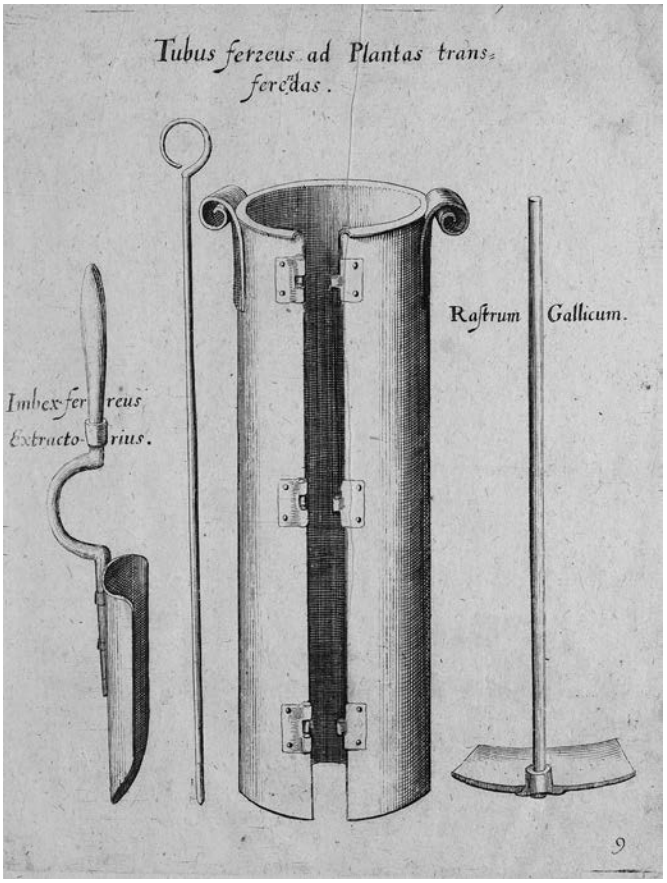
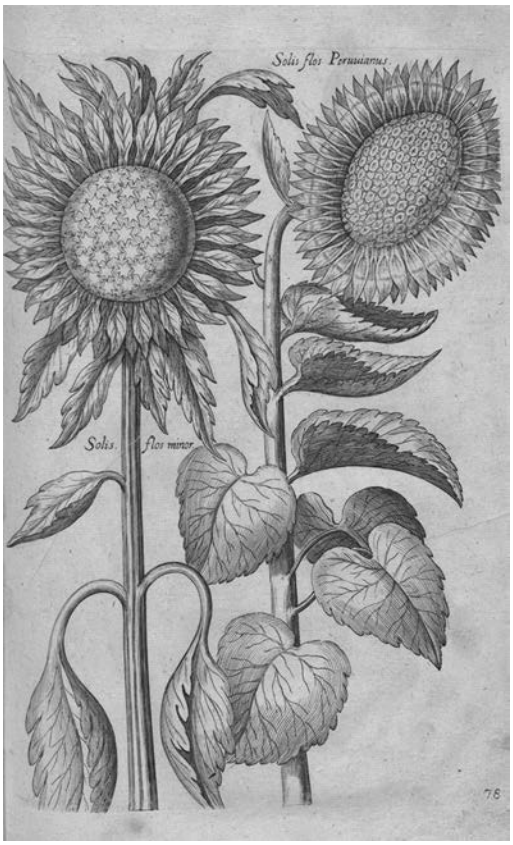
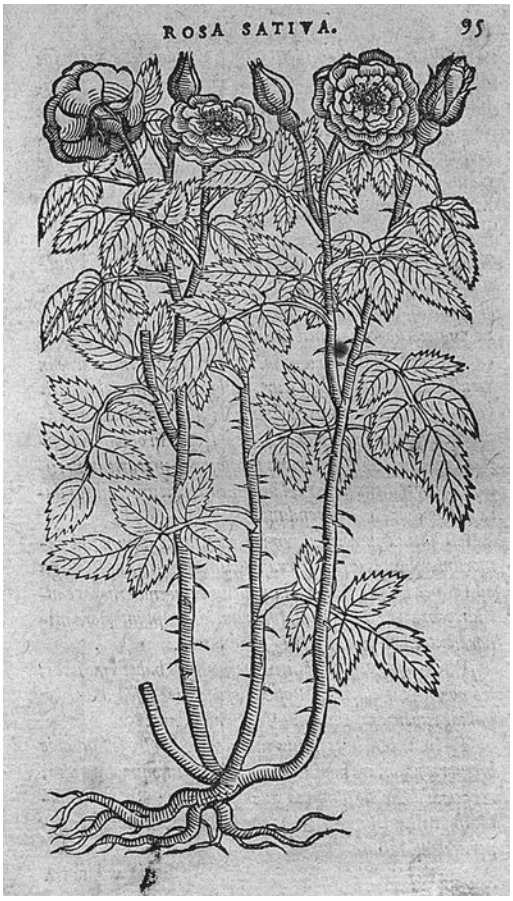


Figure 4. Matthäus Merian, Garden appliance from *Florilegium Renovatum et Auctum*, 1641, engraving, 30.1 x 20 cm. Heidelberg University Library.


Idem Vas ordinatis Floribus conspicuum.
11


Solis flos Peruuianus.
Solis flos minor
78


ROSA SATIVA. 95

◄ Figure 5. [*facing page, top left*] Matthäus Merian, Flower display from *Florilegium Renovatum et Auctum*, 1641, engraving, 30.1 x 20 cm. Heidelberg University Library.

◄ Figure 6. [*facing page, top right*] Johann Theodor de Bry and Matthäus Merian, Two variations of sunflowers from *Florilegium Renovatum et Auctum*, 1641, engraving, 30.1 x 20 cm. Heidelberg University Library.

◄ Figure 7. [*facing page, bottom left*] Adriaen Collaert, Several roses from *Florilegium*, 1587-1589, engraving, 17.7 x 12.6 cm. Rijksmuseum, Amsterdam.

◄ Figure 8. [*facing page, bttom right*] Rembert Dodoens, "Rosa Sativa" from *Florum, et Coronariarum Odoratarumque Nonnullarum Herbarium Historia*, 1569, woodcut. Biblioteca del Real Jardín Botánico, CSIC.

Figure 9. Johann Theodor de Bry, Frontispiece from *Florilegium Novum*, engraving, 1612, 30.1 x 20 cm. From the Rare Book Collection of the Lenhardt Library of the Chicago Botanic Garden.

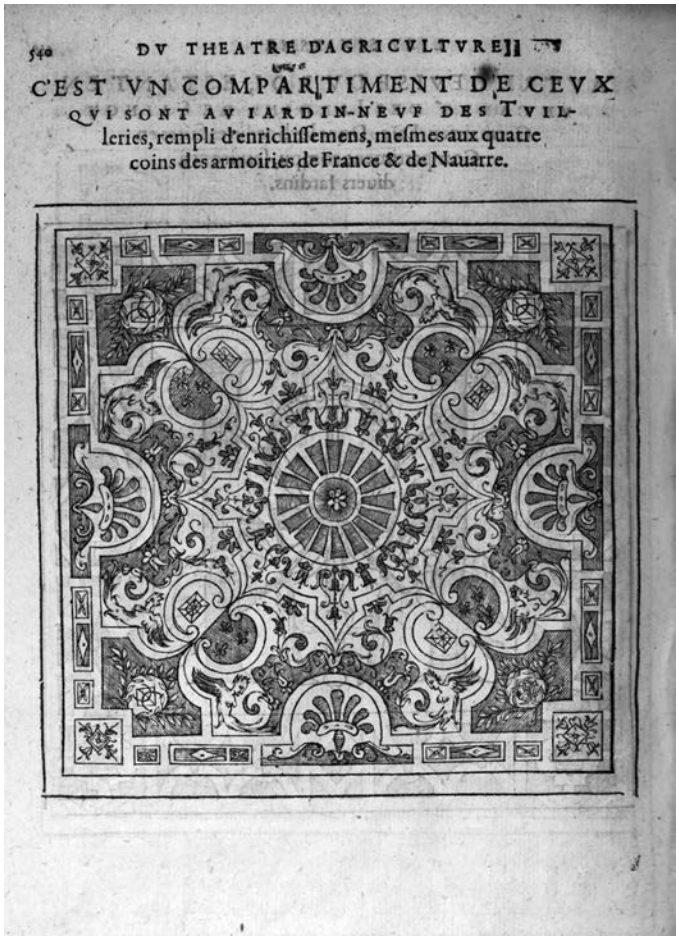


Figure 10. Olivier de Serres, Parterre design from *Le Théâtre d'Agriculture*, 1603, woodcut. Bayerische Staatsbibliothek München, bsb 10229138, S. 564, urn:nbn:de:bvb:12-bsb10229138-5.