

The Place of Maria Sibylla Merian's Books in Eighteenth-Century Private Libraries

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Which early-modern books provided the intellectual contexts for readers first encountering the works of Maria Sibylla Merian? In this essay, I probe connections between various texts and genres and her books in order to shed light on the early reception of Merian's works. To do so, I use a database of hundreds of printed catalogues of eighteenth-century private libraries as well as historical bibliometric methods to ask a series of related questions.¹ How does the presence of specific titles in eighteenth-century private libraries correlate to the presence of books by Merian? What were the other books typically found sitting next to Merian's books on readers' bookshelves? And what do these tell us about the ways contemporary readers may have interpreted her works? In other words, what is the larger literary system or ensemble of connections between different works and authors, and between different cultural and scientific contexts, of which Merian's oeuvre was initially perceived to be a part?

Physico-Theology and Natural History

Maria Sibylla Merian was not the first author to evoke the caterpillar's wondrous metamorphosis into chrysalis and, finally, dazzling butterfly. This transformation provided one of the most compelling images in early-modern literature. From the mid-seventeenth to the end of the eighteenth century, it recurred in different works and textual genres, across different national and linguistic contexts. Thus, by the end of the eighteenth century, taking up a by then well-worn literary *topos*, Dutch novelist Elisabeth Maria Post (1755–1812) described a country walk undertaken by two female friends in her novel *Het land, in brieven* (1788). In the course of the walk, the young women enter a graveyard and stop before a tombstone on which they discover the carved image of a butterfly. Emilia, the alter-ego of the author, explains to her friend Eufrozyne the meaning of this image. Her account begins with an apparently naturalistic description of the caterpillar's transformation:

Yes, a butterfly [...] emerges out of its prison, and under its surface is the caterpillar as it first was. Nothing in all of nature gives us such an accurate image of the changing destiny of bodies as this little being: first it is a little worm, crawling over the earth, or on a tree; it is in continuous danger of being stepped on; then it weaves itself into a little cell, in which it passes a length of time in unfeeling slumber, until the moment when, newly equipped with wings, it emerges as a fine butterfly, and cleaves the air with brightly colored blades, flitting forth from place to place.

Lest the reader think this is merely a description of a natural phenomenon, such as in another well-known contemporary work, the bestselling *Histoire naturelle* (1749–1789) by Georges-Louis Leclerc de Buffon (1707–1788), the speaker then sets out the Christian meaning of this image. Implicitly referencing the etymological link with the Greek term *psyche*, denoting both the human soul and butterflies, she continues:

Do those who awake again in Jesus not undergo a similar transformation? Down here they drag along a weak, insignificant, necessitous body, that is bound to the earth with torpid slowness. This body shall one day pass into an unfeeling state of death; for years and centuries it will remain so; but on the day of resurrection, out of this vile dust, shall rise a fine, handsome, delightful, immortal body; a body that is

no longer bound to the earth, but that with the speed of light, with the swiftness of a seraph, will fly forth from one part of Creation to the other; and shall be similar to the body of the glorified Savior. How joyous is our expectation!

Readers familiar with Merian's work will easily recognize in the first part of this episode the image of natural metamorphosis that is at the center of her natural history publications. But the second part of the passage, which proposes a theological interpretation of the caterpillar's metamorphosis, may appear less obviously related to Merian—unless one bears in mind Merian's own Labadist ideas and her deep religiosity during the 1680s. Linking science with religion was not exceptional in this period. Much of the groundbreaking entomological research carried out in the seventeenth and eighteenth centuries, by the likes of Johannes Goedaert (1617–1668) and Johannes Swammerdam (1637–1680), was bound up with Christian religiosity and a distinct set of theological views. According to these, besides the Bible there was another book that individuals could study to honor God: the Book of Nature. The study of humble insects, in particular, the lowest of the lowly according to the traditional scheme of the natural world, the Great Chain of Being, was an ideal instrument to confront budding scientists with the wonders of creation. Encouraging the faithful to adopt the humility due towards God's almighty hand, natural scientists adopted an adage inspired by Pliny: "God is revealed in the

smallest creations" (*ex minimas patet ipsi Deus*). In the eighteenth century this strain of physico-theology would lead to works such as *Insecto-theologia* (1738) by Friedrich Christian Lesser (1692–1754), translated into English as *Insecto-Theology, or a demonstration of the being and perfections of God, from a consideration of the structure and economy of insects*. In the Netherlands, another work in this tradition, the four-volume *Katechismus der Natuur* by Johannes Florentius Martinet (1729–1795), published in 1777–1779, had a direct influence on Elisabeth Maria Post's novel.

The passage from Post's *Het Land* cited above is illustrative of a larger cultural and intellectual phenomenon, whereby the image of the caterpillar's metamorphosis recurred throughout eighteenth-century literature and thought. It surfaced not only in expressly scientific works, but also in physico-theological works, in sentimental novels, and in pedagogical publications aimed at a juvenile reading public. In another literary commonplace that was recycled throughout the century, pedagogues established a rhetorical comparison between the metamorphoses portrayed in fiction and the facts of science. Contrasting the false fairy tales and the *Metamorphoses* of Ovid to the true wonders of nature, epitomized by the caterpillar's metamorphoses, authors such as Marie Leprince de Beaumont and Félicité de Genlis argued that the latter were a subject vastly more worthy of young people's attention. It followed that natural history should hence take pride of place in modern educational

programs, and the caterpillar was itself conceived as a powerful metaphor for the child in need of nurturing. Given the ubiquity of these caterpillar-butterfly images, it might be hypothesized that such texts provided some of the cultural contexts in which contemporary readers first encountered Merian's works, and that physico-theological works would therefore be likely to appear in libraries alongside Merian's books.

Collectors and Libraries

In two earlier publications, I established that works by Merian were reported relatively frequently in eighteenth-century libraries. Based on a survey of 254 eighteenth-century Dutch private library auction catalogues that listed a total of 500,000 books, I concluded that one or more of Merian's titles were present in 19% of the catalogues, or about one in five libraries. This ranking put her almost on par with Georges-Louis de Buffon, whose *Histoire Naturelle* was reported in 26% of the catalogues printed after 1749, the date of publication of his first major work. A second study subsequently identified a number of additional Dutch private library auction catalogues that listed works by Merian, bringing the total number of Dutch collectors who reportedly owned her work to 78. Despite the suggestiveness of these early findings, however, these were no more than initial samplings, since the corpus of catalogues was exclusively Dutch and might therefore favor publications by an author who was also based in the United Provinces for

part of her life. More importantly, because these studies necessarily focused only on selected titles, it was not possible to establish comprehensive, comparative statistics.

To fully understand the position of Merian's work in eighteenth-century literature, digital methods and quantitative tools capable of leveraging "big data" are indispensable. Only such tools can reveal correlations between her works and others with which they may share key imagery. Such an approach to Merian's works is now possible, thanks to the digitization of a corpus of six hundred private library auction catalogues by the MEDiate project (*Measuring Enlightenment: Disseminating Ideas, Authors, and Texts in Europe 1665–1830*), funded by the European Research Council. This project seeks to study the circulation of books and ideas in eighteenth-century Europe by drawing on a database of several hundred eighteenth-century private library auction catalogues. Although digitization is still underway at the moment of writing (April 2021), 580 of the six hundred catalogues have now been sourced, and the dataset is robust enough to allow some preliminary analyses. This dataset differs in significant ways from the ones I used to measure Merian's commercial success as published in my earlier article. First, its geographic scope is broader, as it embraces private library catalogues from the Netherlands, France, Italy, and British Isles. These are evenly distributed in the period 1700–1830, which is the focus of the analysis below,

allowing for meaningful transnational comparisons. Secondly, while my earlier study also included anonymous collections, the MEDiate dataset focuses on libraries that are clearly described as belonging to a named owner. These catalogues, I hypothesize, provide a more or less accurate snapshot of those individuals' library holdings at the moment when the catalogue was drawn up, typically after the owner's death. Finally, because the MEDiate project seeks to address not the most well-known bibliophile collections and collectors, which have hitherto attracted most scholarly attention, but the more "ordinary" segment of the library auction market, it restricts its corpus to smaller libraries that mostly list fewer than one thousand titles.

Table 1 provides an overview of the libraries in the MEDiate corpus that report one or more works by Merian. Perhaps the most surprising feature of this list is its modest size. My previous studies, drawing on fewer but larger, more bibliophilic private library auction catalogues identified 78 collectors whose libraries reported titles by Merian; the MEDiate corpus of smaller catalogues turns up only 28. My 2004 study identified works by Merian in 19% of the eighteenth-century libraries I researched, but works by Merian are present in only 6% of the library catalogues in the MEDiate catalogues of libraries sold between 1700 and 1830. This conspicuous difference may be explained by the relatively small size of the MEDiate catalogues. As I noted in an earlier



Fig. 1 J. Buys, Frontispiece for Pieter Cramer, *De Uitlandsche Kapellen, voorkomende in de Drie Waereld-Deelen Asia, Africa en America*, Amsterdam & Utrecht 1779 (detail). Wikimedia Commons.

publication, collections reporting works by Merian “were, in general, slightly larger-than-average collections within the broader corpus of libraries sold at auction in the Dutch Republic”. Collection size, a possible indication of the wealth of the collector, seems to be a significant factor determining whether Merian’s works are present in libraries. Kate Heard’s statement that, in the eighteenth century, “the *Metamorphosis* could be found in any self-respecting library” hence requires some nuance. Elite libraries certainly made room for these costly, luxurious works, but less bibliophilic collectors appear on occasion to have bypassed them for other, more accessible volumes.

Further patterns emerge from this overview of library catalogues in the MEDIAN database that report one or more of Merian’s works. Generally speaking, this population of library

owners bears similarities with the one documented in earlier studies of Merian book ownership. Thus, it includes several art collectors, who presumably valued Merian’s works for their visual aspect rather than their scientific content. Colonial administrators are also well represented, likely reflecting the exotic attractions of her Suriname volume. Most prevalent among the collectors are physicians and biologists. Among them figure collectors such as Pieter Cramer (1721–1776), author of the sumptuously illustrated *Uitlandsche Kapellen, voorkomende in de drie Waereld-Deelen Asia, Africa en America*, inspired by Carl Linnaeus (1707–1778) and published between 1775 and 1782, whose frontispiece also referenced Merian’s works (Fig. 1). Another biologist and collector was Richard Pulteney (1730–1801), an English biographer and popularizer of Linnaeus, whose library was sold in London in 1802. But the best-known biologist in this dataset is without a doubt Jean-Baptiste Monet, chevalier de Lamarck (1744–1829). His modest working collection of 830 books was put up for auction by his destitute family upon his death and was sold off at his home in the Jardin du Roi (present-day Jardin des Plantes) on April 19, 1830.

Within this small subset of collections, Dutch libraries are overrepresented. Thirteen of the 28 libraries are Dutch, nine are French, five are British, and one is Italian. Eleven catalogues list more than one copy of a work by Merian (owners italicized in the table). The number of individual items is slightly higher, at 47.

Table 1
Catalogues reporting books by Maria Sibylla Merian in the MEDiate corpus

Owner	Profession	Year	Place
Henri Desmarets (1633–1725)	Huguenot pastor, Bible editor	1725	The Hague
Hendrik Swart (dates unknown)	Admiralty of Amsterdam, Dutch West India Company official	1728	Amsterdam
John Coleman (?–ca. 1730)	unknown	1730	London
Jacobus van Nokken (?–1729)	physician	1741	Utrecht
Johan Bernhard van der Marck (dates unknown)	Warmond bailiff?	1747	Leiden
Gerard Schaak (dates unknown)	unknown	1748	Amsterdam
Jan Arnold van Orsoy (1700–1753)	merchant, poet-translator	1754	Amsterdam
Abraham de Brauw (?–1763)	Hof van Vlaanderen magistrate	1763	Middelburg
Marie-Joseph de Savalette de Buchelay (1727–1764)	<i>fermier général</i> , natural history collector	1764	Paris
Jean Nicolas Taverne de Renescure (1694–1769)	Parlement de Flandre magistrate	1764	Lille
Pierre-Jean Mariette (1694–1775)	art dealer and collector	1775	Paris
George Colebrooke (1729–1809)	East India Company chairman, M.P.	1777	London
Pieter Cramer (1721–1776)	merchant, entomologist	1777	Amsterdam
Jan Joost Marcus (1729–1780)	magistrate, Amsterdam orphanage regent	1780	Amsterdam
Christophe-François Nicolau de Montribloud (1733–1786)	baron, banker, art collector	1782	Lyon
Jean-Thomas Aubry (1714–1785)	Catholic priest, bibliophile collector	1785	Paris
Frangipani family	Roman patrician family	1787	Rome
Benjamin Newton Bartlett (1745–1787)	unknown (son of antiquarian)	1789	London
Robert Masters (1713–1798)	clergyman, historian	1798	London
Maria Suzanna Markon (née Barnaart) (?–1799)	widow of doctor and art collector, poet	1799	Leiden
Richard Pulteney (1730–1801)	physician, botanist, Linnaeus biographer	1802	London
Albert-Paul Mesmes, comte d'Avaux (1751–1812)	cavalry officer, <i>gentilhomme d'honneur</i>	1804	Paris
Cornelis Michiel ten Hove (?–1805)	magistrate	1806	The Hague
Pieter Smeth van Alphen (1753–1810)	merchant, banker	1810	Amsterdam
A. R. Jolles (dates unknown)	unknown (Albertus Richardus Jolles?)	1812	Amsterdam
Charles Léopold von der Heyden Belderbusch (1749–1826)	count, diplomat, prefect, senator	1826	Paris
François-Benoît Hoffmann (1760–1828)	playwright, critic	1828	Paris
Jean-Baptiste de Monet de Lamarck (1744–1829)	botanist, Muséum national d'Histoire naturelle curator	1830	Paris

due to what were probably convolutes or *Sammelbände* reported in a number of lots; in one case (Benjamin Newton Bartlett's library, sold in 1789), Merian's *Metamorphosis Insectorum Surinamensium* was bound together with the *Histoire des Insectes de l'Europe*, published in 1730.

Most often, however, her *Caterpillar Books* and *Metamorphosis* in Dutch or French were united in a single volume in folio: *Europische Insecten* or *Histoire des Insectes de l'Europe*, both published in 1730. Corroborating previous findings from advertisements, the list of libraries

Table 2
Merian works in private libraries and the language in which they are reported

Title	Dutch	Latin	French	German
Caterpillar Books	15	5	7	1
<i>Metamorphosis Insectorum Surinamensium</i>	10	6	3	-

reporting books by Merian suggests that most auctions of her works took place in the decades from the 1760s through 1790s; the largest concentration of library catalogues reporting her books (eight of the 28) date from the 1770s and 1780s.

The libraries listed in Table 1 held an average of 1,063 items, which makes them slightly larger than the average library in the MEDiate corpus but, interestingly, there are also some smaller libraries. Six of the libraries that report more than one work by Merian held fewer than one thousand items, and two of them fewer than five hundred, namely the library of Benjamin Newton Bartlett (418 items, three of those works by Merian) and of *fermier général* Marie-Joseph de Savalette de Buchelay (399 items, four of those works by Merian). Finally, in contrast to my previous studies, based on another corpus of catalogues (see above) in which I found copies of all of Merian's works in Dutch catalogues, the MEDiate corpus turns up only her Caterpillar Books, most frequently in Dutch translation, and her *Metamorphosis*. In keeping with Dutch overrepresentation, 25 of the 47 titles are in Dutch, versus eleven in Latin, and ten in French (Table 2). Only a single copy of Merian's Caterpillar Book in its original German edition was reported, in the li-

brary of the Amsterdam citizen Gerard Schaak. The scarcity of German editions means that most readers had access only to the severely truncated versions of Merian's work provided by the Dutch and other translations, negatively impacting the reception of her scientific work. However, it is likely that the buyers of the Dutch translation of the Caterpillar Book did not know that they had purchased a shortened version of the book.

In short, aside from the overall lower frequency of books by Merian in these smaller libraries, the distribution of titles and population of owners appears largely similar to the presence of her books in larger libraries, as is shown in my earlier studies. Let us turn now to the broader cultural contexts against which these books were potentially positioned.

Profiling the Merian-Holding Library

Eighteenth-century individuals who acquired books by Merian did not, of course, own only books by her. If only one—or at most, three or four—of the thousand-odd items in each of these catalogues was by Merian, this raises questions about the identity of the other books that sat on shelves beside hers and what they might reveal about the intellectual outlook of their owners. Ultimately, such

Table 3
Top-ranked authors in Merian-holding and in non-Merian-holding libraries, 1725–1830

Rank	Non-Merian-holding libraries (n=420)		Merian-holding libraries (n=28)	
	author	% libraries	author	% libraries
1	[Bible]	92%	Merian	100%
2	Ovid	79%	[Bible]	93%
3	Horace	76%	Ovid	89%
4	Virgil	75%	Horace	89%
5	Cicero	71%	Virgil	82%
6	Tacitus	67%	Erasmus	82%
7	Homer	65%	Tacitus	82%
8	Fénelon	65%	Fénelon	82%
9	Terence	64%	Cicero	75%
10	Erasmus	63%	Joseph Addison	71%
11	Grotius	62%	Grotius	68%
12	Plutarch	60%	Quintus Curtius	68%
13	Flavius Josephus	60%	Terence	64%
14	Voltaire	60%	Homer	64%
15	Seneca	58%	Juvenal	64%
16	Juvenal	58%	Pliny the Elder	64%
17	Quintus Curtius	57%	Flavius Josephus	64%
18	Julius Caesar	56%	Rumphius	64%
19	Pufendorf	55%	Plautus	64%
20	Joseph Addison	54%	Voltaire	61%

questions might help answer the larger question of how individuals actually interacted with Merian's books and how large-scale data on book ownership might be leveraged to provide new clues about eighteenth-century reading culture. What other works did Merian owners keep in their personal libraries? And does a comparison of library contents allow us to establish a correlation between ownership of Merian's works and other genres, specifically other types of text that similarly focus on the life cycle and metamorphoses of caterpillars? In other words, what is the profile of the typical Merian-holding library? In order to

address these questions, I started by drawing up a list of the authors most frequently reported in the 28 Merian-holding libraries, compared to non-Merian-holding libraries (Table 3). I restricted my analysis to the period 1725–1830, since the first Merian book in the corpus was reported in 1725, in the library of Huguenot pastor and Bible translator Henri Desmarets, based in The Hague.

The most frequently reported authors in these libraries usually date back to classical antiquity. Only six (12%) of the top-ranked authors in non-Merian-holding libraries are post-medieval, and only

three of those—Fénelon, Voltaire, and Joseph Addison—are eighteenth-century authors. The picture is similar for Merian-holding libraries. Only seven of the twenty top-ranked authors are modern authors, including Merian herself. This classical dominance persists right down the list, for the first hundred top-ranked authors. The two books that were most likely to occur in a library with Merian's *Metamorphosis* were the Bible and, quite fittingly, another classic volume: Ovid's *Metamorphoses*. The commonplace eighteenth-century comparison between the metamorphoses of caterpillars and the mythological transformations described by Ovid may have reflected a book owner's reality, whereby the two books might have been found together in eighteenth-century libraries.

Despite this decidedly classical bent in the libraries sampled, there are differences between the two lists. Merian-holding libraries tend to contain larger proportions of works by any given author than non-Merian-holding libraries. For example, Ovid is reported in 89% of the Merian-holding libraries versus 79% of the non-Merian-holding libraries; expressed as a factor, works by Ovid are 1.13 times more likely to be found in the former than in the latter. This pattern holds throughout the table, with overall higher relative proportions of books by the top-ranked authors in Merian-holding libraries and an average factor of 1.09 for the entire top-twenty list. Only three authors figure relatively more frequently in non-Merian-holding libraries: Plutarch, Homer, and Seneca. The au-

thors in Merian-holding libraries who most significantly outperform their rankings in non-Merian-holding libraries are all modern: Joseph Addison (factor 1.31), Erasmus (1.3), and Fénelon (1.26). Thus, libraries that report one or more works by Merian could be described as slightly more modern in outlook than libraries without her works.

Not surprisingly, libraries that report works by Merian often hold another well-known, modern illustrated work of natural history, Georg Everhard Rumphius's *D'Amboinsche Rariteitkamer*. This work by Rumphius was published in 1705, the same year as Merian's *Metamorphosis*, with illustrations sometimes attributed to Merian herself. Rumphius's works were in 64% of the libraries that also contained works by Merian. By contrast, his works appear in only 5% of the libraries of non-Merian owners—an enormous difference. A less extreme contrast is provided by the relative ranking of the works of Pliny the Elder, whose *Naturalis Historia*, despite being superseded by the findings of modern natural history, remained a staple of learned collections until the end of the eighteenth century. While titles by Pliny are reported in 64% of the libraries that also held one or more works by Merian, they figure in only 45% of the libraries that did not. Such comparisons suggest that interest in the books of Maria Sibylla Merian might have been motivated as much by their exceptionally attractive illustrations (like Rumphius), as by their ostensibly scientific subject matter (like Rumphius and Pliny).

Table 4

Natural history authors in Merian-holding and non-Merian-holding libraries

Author	Merian-holding libraries	Non-Merian-holding libraries	Factor
Johannes Swammerdam	50%	7%	7.14
Georges-Louis de Buffon	46%	24%	1.92
Johannes Goedaert	46%	9%	5.11
Carl Linnaeus	39%	16%	2.44
Jean-Antoine de Réaumur	32%	10%	3.20
Herman Boerhaave	29%	18%	1.61
Francesco Redi	18%	4%	4.50
Anton van Leeuwenhoek	18%	7%	2.57

Scientific and Physico-Theological Works in Merian-Holding Libraries

If the top twenty authors listed in Merian-holding libraries reveal a modern outlook and a preference for works of natural history, then one might expect this pattern to hold among less frequently cited authors, too. The most obvious intellectual affinity that Merian's works harbor is with the works of other early scientists and entomologists, such as Goedaert's *Metamorphosis Naturalis* (1660–1669). Table 4 compares the percentage of Merian-holding versus non-Merian-holding collections containing works by a representative selection of seventeenth- and eighteenth-century entomologists and other natural history authors.

Clearly, libraries with one or more works by Merian reported more natural history books overall, ranging from a factor of 1.61 (Boerhaave) to a substantial 7.14 (Swammerdam). This disparity holds especially for works that examined insect life. Libraries with works by Merian are

over seven times more likely to report Swammerdam's groundbreaking 1669 volume, *Historia Insectorum Generalis ofte Algemeene Verhandeling van de bloedeloose Dierkens*, as well as the posthumous edition of his work by anatomist Herman Boerhaave, bearing the significant title *Bybel der Natuure of Historie der Insecten=Biblia Naturae, sive Historia Insectorum* (1737). Swammerdam was another proponent of the physico-theological belief that the exquisite organization of the caterpillar's metamorphosis was an emblematic expression of the order of the universe itself, created by the Supreme Being. After Swammerdam, the second most reported author in Merian-holding libraries was Goedaert, towards whose *Metamorphosis Naturalis* (1662–1669) the title of Merian's own *Metamorphosis* appeared to gesture. Goedaert is followed by Italian physician-poet Francesco Redi, whose refutation of the Aristotelian theories of spontaneous generation, set out in *Esperienze intorno alla Generazione degl'Insetti*, was published just one year before the book by Swammerdam.

Table 5
Illustrated works of natural history in Merian- and non-Merian-holding libraries

Author	Merian-holding libraries	Non-Merian-holding libraries	Factor
Georg Everhard Rumphius	64%	5%	12.8
Mark Catesby	36%	2%	18.0
August Johann Rösel von Rosenhof	18%	3%	6.0
C. and J. C. Sepp	14%	2%	7.0
Eleazar Albin	11%	2%	5.5
Pieter Cramer	7%	0,07%	100.0

As noted above, however, the title that outperforms other modern titles by a factor of 12.8 in Merian-holding libraries is Rumphius's *Amboinsche Rariteitkamer*. Table 5 therefore compares the presence of other natural history works noted for their illustrations in both types of library.

Focusing on the specific genre of scientific illustration brings out the most defining feature of Merian-holding libraries. These were libraries not only with a modern outlook and a bias towards works of natural history, but libraries that also displayed a marked interest for richly illustrated works of natural history. Merian-holding libraries were five (Albin) to one hundred times (Cramer) more likely to also hold other illustrated works of natural history. While these findings are hardly surprising, they do show that bibliometric methods can confirm perceived links, noted by previous commentators, between Merian's works and titles such as Mark Catesby's *The Natural History of Carolina, Florida and the Bahama Islands* (1731–1747), or August Johann Rösel von Rosenhof's directly Merian-inspired *Insecten-Belustigung*. The latter was published in German in install-

ments from 1746 onwards, and later in Dutch (ca. 1764–1766). The illustrations were made and etched or engraved by the author himself, just as Merian had illustrated her own works. Later installments were probably colored by his artist-scientist daughter, Katharina Barbara Rösel von Rosenhof. These myriad lines of intellectual affinity and even influence running between authors and works can thus be made newly visible through statistical analyses of the contents of eighteenth-century libraries.

Works that displayed a broader physico-theological outlook may have held a particular attraction for Merian owners. Table 6, finally, compares the frequency of works by physico-theological authors in both types of library. Casting the net widely, it includes authors working in various periods and national contexts, from the British Isles (Derham, Ray) to the Netherlands (Nieuwentijt, Martinet, Post), France (Pluche), Germany (Lesser), and Switzerland (Bonnet).

The relative frequencies in this final table are less notable than the ones in previous comparisons, but do indicate trends. Works by physico-theological authors are reported more often in

Table 6

Physico-theological authors in Merian-reporting and non-Merian-reporting libraries

Author	Merian-holding libraries	Non-Merian-holding libraries	Factor
Noël-Antoine Pluche	54%	44%	1.23
John Ray	32%	14%	2.29
William Derham	32%	26%	1.23
Bernard Nieuwentijt	25%	19%	1.32
Charles Bonnet	25%	8%	3.12
Johannes Florentius Martinet	14%	11%	1.27
Elisabeth Maria Post	11%	3%	3.67
Friedrich Christian Lesser	7%	4%	1.75

Merian-holding than in non-Merian-holding libraries. The most commercially successful of these authors, Elisabeth Maria Post, is almost four times more likely to figure in a Merian-holding library than in a non-Merian-holding library, although this apparent predominance may be skewed by the overrepresentation of Dutch library auction catalogues among Merian-holding libraries. Of the non-Dutch authors, the highest ratio is by Genevan naturalist and philosopher Charles Bonnet, whose 1745 *Traité d'insectologie* did much to update and reintegrate a Christian-inspired Great Chain of Being scheme into modern biology. Particularly prevalent authors such as Noël-Antoine Pluche (*Le spectacle de la nature*) and William Derham (*Physico-theology*), as measured by absolute numbers of books in the library catalogues in my corpus, are reported in Merian-holding libraries in frequencies comparable to non-Merian-holding libraries. Pluche and Derham are 1.23 times more likely to figure in Merian-holding libraries than in non-Merian-holding ones, only slightly

more than the average overrepresentation factor of 1.09 obtained for *all* books in Merian-holding libraries.

Conclusion

Using the computational power of the MEDIANTE database to construct a profile of eighteenth-century private libraries holding works by Maria Sibylla Merian allows historians to sketch the contours of the “common” Merian book owner. Comparisons of Merian-holding and non-Merian-holding libraries show measurable, if sometimes subtle differences between the two types of libraries. In some cases, these trends appear obvious enough to raise new questions and call for further, close-reading analyses of the similarities between these works to complement initial, distant-reading approaches.² Both kinds of libraries display the same predilection for the canonical authors and works of classical antiquity, but the libraries of Merian owners have a slightly more modern outlook and a distinct bent towards works of a scientific nature, particularly richly illustrated works of

natural history. What is more intriguing, perhaps, is that libraries that report one or more works by Merian also share more pronounced physico-theological leanings than non-Merian-holding libraries. This reminds us that to understand the broader intellectual contexts in which eighteenth-century individuals approached Merian's work, it is necessary to consider the theological framework within which early-modern work in natural history was embedded.

These contexts point not only to significant relations between art and science, but also between religion and science. Reconsidering the links between the development of Merian's religious identities and cultural contexts may therefore further elucidate the meanings that her two major works, the *Raupenbücher* and her *Metamorphosis*, held for contemporary readers, well into the eighteenth century.

Maria Sibylla Merian

Changing the Nature of Art and Science

Edited by Bert van de Roemer, Florence Pieters,
Hans Mulder, Kay Etheridge & Marieke van Delft

Lannoo