

Martin Meurisse, Artificiosa totius logices descriptio. [Paris], 1614. Graphic Arts Collection, Princeton University Library.

# System and Schema

## Tabulae of the Fifteenth to Eighteenth Centuries

## BY STEPHEN FERGUSON

Since 1977, Professor W. S. Heckscher, Agnes Sherman, and Curator of Rare Books Stephen Ferguson have been examining the Library's distinguished collection of emblem books. Their work led to the 1984 publication, Emblem Books in the Princeton University Library: A Short-Title Catalogue, and to Mr. Ferguson's interest in the relationship between emblem books and other printed materials of the Renaissance and Baroque which use text, image, and allegory. Among the examples of such forms are tabulae, several of which have been acquired recently by the Library. They were included in the Autumn exhibition, "Knowing Through Seeing: Diagrams, Schemata, and Tableaux in Early Printed Books, Medieval Manuscripts, and Prints," in the Library's Gould Gallery.

In the following article, Mr. Ferguson discusses a few of these new acquisitions.

At the bottom edge of the illustration on the facing page, a Franciscan monk gestures towards several novices. Behind him is a walled courtyard surmounted by a formal garden above which stands a grove of trees. Exactly what is the monk doing? Why such an exotic scene of trees, fountain, half-clad women, and numerous small objects?

The monk is Martin Meurisse (1584–1644), a Cordelier Franciscan who eventually became Bishop of Madaure. His duties included training novices, and toward that end he prepared three instructional charts. In 1983 Princeton University Library acquired the first in the series, "A technical and artfully-done depiction of logic in its entirety" (Artificiosa totius logices descriptio), published in 1614. In the Logices de-

<sup>&</sup>lt;sup>1</sup> It was followed in 1615 by the Clara totius Physiologiae Synopsis ("A clear synopsis of

scriptio, Meurisse is shown teaching the novices how the three chief operations or processes of the intellect—according to Duns Scotus and Aristotle, as interpreted by Meurisse—can be apprehended by studying the details of the chart.

The chart is divided into two principal parts: the three-tiered central feature depicting the *operationes mentis*, and a surrounding border of emblems. The three tiers of *operationes* are the traditional Scholastic processes of the intellect arranged in a hierarchy, with the lowest, Categories, at the bottom, followed by Judgment, and Syllogism at the top.<sup>2</sup>

Categories are represented by a walled-in courtyard entered by ascending five steps and going through a portal. The steps are the five predicables of Aristotelian logic as interpreted by Porphyry, among others: genus, species, difference, property, and accident. Within the courtyard are Aristotle's ten categories (substance, quantity, quality, relation, action, passion, place, time, position, and state) flowing from the central source, the *fons* of being. The *fons* is a pool adorned with a statue of a half-clad man standing with one foot on a sphere. A banner over his head reads: "The first process of intellect refers to differentiating thinking, which explains the nature of an object."

The second process of intellect, Judgment, is depicted as a formal, hedged-in garden at the gate of which sits a half-clad woman, perhaps Judgment personified. Like the man below, she has a banner over her head. Hers reads: "This is the dividing process in which the whole is distributed into its parts, or the manifold is separated according to the multiplicity of the whole." In the garden behind the woman are inscriptions giving particulars concerning the process of judgment.

Syllogism is a grove of three trees that sit above the second realm. The central tree is the "Tree of Knowledge," flanked on the left by the "Tree of Sophisms," and on the right by the "Tree of Beliefs." Each tree is ripe with its corresponding fruit; the Sophists' tree bears the fruit "error" and "ambiguity." In front of the central tree sits a gowned woman with outstretched arms. An inscription above her arms reads:

physiology in its entirety"), and the Artificiosa totius Moralis Philosophiae tabella ("A technical and artfully-done tableau of moral philosophy in its entirety"), probably dated 1630. The 1614 Logices descriptio acquired by Princeton is kept with other oversize prints of 17th-century France in the Graphic Arts Collection, Firestone Library.

<sup>2</sup> C.R.S. Harris, Duns Scotus, 2 Vols. (Oxford: Clarendon Press, 1927), Vol. 2, p. 7.

"This is argumentative process (syllogism) in which the one is concluded from the other."3

Embedded in the border surrounding the three realms of operationes mentis are many emblems. Outside the first and lowest realm lie bits and pieces of reality (ens incompletus) separated from their completed form by the wall of carentia, or deprivation. Outside the second realm the Sophists pipe on their harmonicas, perhaps a reference to fools and their pipes. In the upper corners are miniature portraits of Aristotle (right) and Duns Scotus (left), whose doctrines Meurisse is explicating in his chart. In the uppermost compartment, the Logices descriptio is dedicated to Jacques Auguste de Thou, the great French bibliophile, a nobleman and member of the Third Order of St. Francis.

These are only a few of the most obvious readings of the chart. A full explanation would take many pages, just as Meurisse intended, and just as is entailed by the instructional form which he used, a *tabula*.



Looking back over the history of printed books, one can see shifts in the forms and means by which mankind has sought to communicate large and complex bodies of knowledge. One of those changes occurred with the use of *tabulae*, which are charts, plans, maps, or tables summarizing an extensive body of information usually within the space of just one page. The intent of such a summary is quick reference, or to aid the memory, or to provide a ready means for seeing complex relationships.

The tabular form has ancient roots and it is even speculated that Aristotle's works could have been "illustrated" by diagrams or tables. In the Middle Ages not only philosophy, but also theology, alchemy, astrology, astronomy, geography and several other divisions of human knowledge used *tabulae*. In early modern Europe, some of these uses withered away, as in the case of theology, while others proliferated, as in the case of astronomy and other natural sciences. Today, the tabular form seems mainly reserved for scientific, statistical, and technical in-

<sup>&</sup>lt;sup>3</sup> I wish to thank Professor William S. Heckscher for assistance with the translations.

<sup>&</sup>lt;sup>4</sup> Michael Evans, "The Geometry of the Mind," in Architectural Association Quarterly, Vol. 12, No. 4 (1980), p. 35.

formation. But this was not always so; tabulae had much more varied forms and functions, especially during the centuries when they were used as devices designed to aid the memory and cultivate the mind.

Over the years, the Latin term tabula acquired a number of meanings, many of which were figurative or nonliteral. The most fundamental meaning of tabula was "wooden plank." This sense survives in our everyday term "table," which has replaced the less socially-prestigious Saxon term, "board." Tabula also took on the meaning of "a picture painted on a wooden panel."5

A related sense of the word in the singular was "an expanse of land,"6 and this sense probably led to the use of tabula to mean "landmap"; Ptolemy's Tabulae Geographicae, published during the Renaissance, come immediately to mind.

The Tabula Cebetis was an ancient "map" of a different kind. It represented the journey of mankind on a moral "Pilgrim's Progress," ascending the mountain of purification and perfection. In the Renaissance, the Tabula Cebetis was a popular text for teaching the Greek language to studiosi adolescentes. Thus, an abstraction, a schema of morality, is made concrete and memorable through a series of images.

For the learned of medieval and early modern Europe, tabula was a powerful descriptor. Like the tabula before the schoolboy, other kinds of tabulae were meant to provide a key to further and deeper knowledge. It provided a kind of "ante-knowledge." This meaning of tabula rests on the premise that knowlege is thematic and is arranged by connectives. Thus, in order to get more and other knowledge, we must have some knowledge already. This sense of the term survives today in our "table of contents," usually printed at the front of books.

Tabulae allowed immediate apperception; the mind was reached through the eye with ideas that normally would have been spoken or read. The means of transfer is vision; the structure of knowledge is intended to be seen. Moreover, the process of knowing through seeing stands in direct contrast to another analogue for knowing, namely, hearing.7

<sup>5</sup> This use appeared in several ancient authors and is discussed in William S. Heckscher's forthcoming Latin glossary for Alciati, Vol. III in the Princeton Emblem Project Series, published by the Princeton University Library.

Tabulae, the tangible products of such thinking, can be divided into two types: non-figural and figural. The non-figural consists principally of words, numbers, and typographic symbols such as brackets arranged in a pattern. Images are normally excluded. Examples include tables of contents, multiplication tables, tax tables, tide tables, and schemes of dichotomies.

The figural type is part of a tradition "the intent of which was to give ... instruction by means of schemas organized in a memorable figural form-a tower, a tree, a cherub-and containing elements related through numerical correspondence—the 12 articles of faith, the 12 prophets, the 12 apostles."8 The figural tabula is intended to provoke a quiet, contemplative process, in which one wanders through a kind of gallery of images or "memory palace."9

Meurisse's logic chart, described at the beginning of this article, is a clear example of the figural tabula. It is a complex array of images arranged in fixed and memorable locations. Recently, the Philadelphia rare-book dealer Bruce McKittrick gave the Library another, bolder example of a figural tabula. It is from a Latin text discussing the Justinian Code, and was published in Hamburg in 1673-1674. Distinguishing this text from many other schoolbooks on the Code are a series of 22 engravings designed to assist students with memorizing important points. The text and plates are the ingenious work of Johannes Buno, a schoolmaster who also prepared a Bible similarly adorned with exotic aids to memory.10

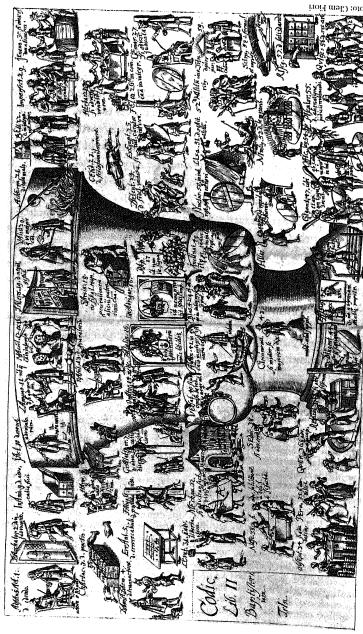
<sup>&</sup>lt;sup>6</sup> For example, in the Scheide Library Collection of Documents, document 20-382 dated Fabriano, 20 October 1212, the Consul of the town, Todius, promises that the next day he will give a tabula of land to the Abbot Moricus and his brethren of St. Victor. 7 Walter Ong, Orality and Literacy. The Technologizing of the Word (London and New

York: Methuen, 1983), p. 119. As Ong points out, "Ambrose of Milan [states] in his Commentary on Luke (iv. 5): 'Sight is often deceived, hearing serves as guarantee.' In the west through the Renaissance, the oration was the most taught of all verbal productions and remained implicitly the basic paradigm for all discourse, written as well as oral. . . . Writing served largely to recycle knowledge back into the oral world, as in medieval university disputations, in the reading of literary and other texts to groups . . . and in reading aloud even when reading to oneself. At least as late as the twelfth century in England, checking even written financial accounts was still done aurally, by having them read aloud. [One scholar] describes this practice and draws attention to the fact that it still registers in our vocabulary: even today, we speak of 'auditing,' that is 'hearing' account books, though what an accountant actually does today is examine them by sight."

<sup>8</sup> Lucy Freeman Sandler, Gothic Manuscripts 1285-1385, 2 vols. (Oxford: Oxford University Press, 1986), Vol. II, p. 59.

<sup>9</sup> See Jonathan Spence, The Memory Palace of Matteo Ricci (New York: Viking Penguin, 1984) for discussion of instructive pictures.

<sup>10</sup> The Library's call-number for the suite of plates is (Ex) KBD.B86 1673. The plates are extracted from Buno's Memoriale juris civilis Romani, quo tituli omnes et praecipuae leges, quae in quinquaginta Digestorum seu Pandectarum libris sunt, emblematibus & imaginibus ita efficta exhibentur, ut una cum titulorum materiis eorum etiam numeri memoriae imprimi, contineri



showing mnemonic images for the 59 Titles in Book II of the Justinian Code in Johannes Buno's Memo ani, . . . (Hamburg, 1673–1674). Gift of Bruce McKittrick. Rare Books Collection, Princeton University

Buno's engravings were to be used in accord with a specific program. First, the student had to discover the underlying image on a single *tabula*. In the engraving for Book II of the Code of Justinian, the principal image is the baptismal font of a church. The student was expected to know that the principal image of the preceding plate (Book I) was an altar, and that the following plate (Book III) carried the image of a *cancelli* ("lattice," or "grid-work"), and so on in exact alphabetical and numerical order.

Next, the student examined and memorized the series of small images fixed on the baptismal font itself. These images are arranged according to the numerical order in which the major subdivisions of a Book in the Code, called Titles, appear, all with mnemonic tags in alphabetical order. Each small, tagged scene depicts the gist of a Title. Thus Title I, "Concerning the bringing of an action," is tagged Adstans Act[or], "The plaintiff appearing in court"; Title II, "Concerning the summons to court," is labelled Bacchator, "Rantor," and so on throughout all 59 Titles of Book II. Clearly, the intent of Buno's engraving was to provide a table of contents which the student could recall by seeing it in his mind's eye.

The figural *tabulae* of Meurisse and Buno point to a technique of memorization called "artificial memory," memory developed purposefully by an individual.<sup>11</sup> The technique is actually quite ancient and was once considered to have been developed by Cicero. It rests on the common judgment that sight is the most powerful of the six senses and thus should be used for remembering. Just as the distinction between object and background is necessary for seeing to occur, so is this distinction central to the classical theory of memory.

In essence, the theory tells us that, to establish background, we must first memorize places. Go to a building, view the doorway, fix it in mind, move along, view a window, fix it and so forth. At this first stage, we build a storage system, an aggregation of niches into which something can be put. Secondly, we proceed to fill these places (topoi or loci) with images. The images (imagines agentes) represent specifics that are

ac reddi quin etiam leges illae praecipuae ad suos referri titulos facili negotio queant . . . edidit Johannes Buno, 2 vols. (Hamburg, 1673–1674). Title of Vol. 2 varies. A complete copy, text and plates, is in the Library of the Harvard Law School.

The best introduction to this subject is Frances A. Yates, "Architecture and the Art of Memory," in *Architectural Association Quarterly*, Vol. 12, No. 4 (1980), pp. 4-13, and in her book, *The Art of Memory* (Chicago: University of Chicago Press, 1966).



Detail from Book II of the Justinian Code in Johannes Buno's Memoriale juris civilis Romani.

intended to be remembered. The images are to be striking (e.g. a bloodied face) so that their power to provoke emotion helps the mind to remember. To recall the memorized data, we then visualize a gallery of images in place, and by scrutinizing them carefully we decode the abstractions represented by the images. The classic example of this process is told in the story of Simonides, who, in addition to Cicero, was credited with inventing the system of artificial memory. Simonides escaped death at a banquet because he was called away from the feast just before the roof collapsed, killing all below. The bodies were so mangled that relatives could not recognize their kin, but Simonides could identify the bodies by remembering where particular guests had been lying. It was by recalling a series of relationships, charted as images arranged on fixed locations, that Simonides was able to perform this mental feat.<sup>12</sup>

The 5th-century A.D. author, Martianus Capella, when discussing

rhetoric in his *De nuptiis Philogiae et Mercurii*, <sup>13</sup> recommended that his readers follow

the Quintilian method of memorising through visualising the tablet, or the page of manuscript, on which the material is written—divided into clearly defined parts with some marks or *notae* on it at special points—which is to be committed to memory in a low murmur.<sup>14</sup>

From the Middle Ages to the end of the Baroque period, tabular thinking, both figural and non-figural, focused on complex philosophical and religious matters. In tabulae like the Epitome of Gospel Mystery emblematically illustrated (London, ca. 1650), 15 the major visual elements and their arrangement in space serve as an exposition of theological dogma. The central scene is flanked by two tall columns covered with text, and surmounted by open sky and clouds. A cherub floats over each capital and trumpets a banner on which a rhymed triplet is inscribed. Below the banner and filling the central space is a scene emblematic of the "Gospel Mystery." Flowing from a fiery sun, a river runs through two hearts (one "of love," the other "of stone") and thence through wounds to irrigate the Tree of Life, beneath which is a portal to a holy place. In front of the door is a porch, which only a few figures have reached. In front of the porch is "The Broad Way to Destruction" on which figures in wigs and waistcoats walk toward a burning pit. To the left of the porch stand Adam and Eve exiting Paradise. All of the figures and scenes are labeled, usually in rhymed couplets and triplets.



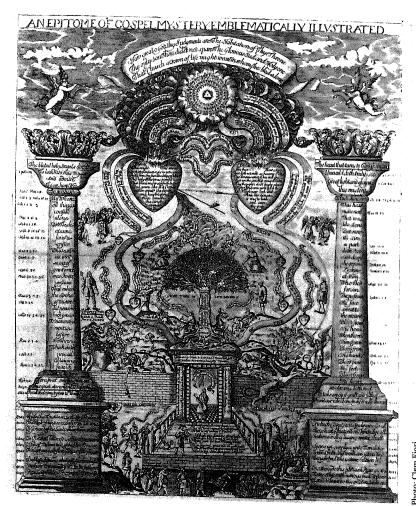
Towards the end of the Baroque period, non-figural *tabulae* appear which seem to presuppose a figural image like a tree. The trees, however, are horizontal rather than vertical, and schematic rather than

<sup>12</sup> The story is told in Cicero, De oratore, II.lxxxvi, 351-354.

<sup>&</sup>lt;sup>13</sup> This work "... preserved for the Middle Ages the outline of the ancient educational system based on the seven liberal arts (grammar, rhetoric, dialectic, arithmetic, geometry, music, astronomy)." See Yates, *Art of Memory*, p. 50.

<sup>14</sup> Yates, Art of Memory, p. 52.

<sup>&</sup>lt;sup>15</sup> The *Epitome* is a large-folio figural *tabula* engraved on a single sheet. It was purchased on the Reed Fund during 1984–1985 and its Library call-number is (Ex) N7710.E64.1650f.



Epitome of Gospel Mystery Emblematically Illustrated [London, ca. 1650]. Rare Books Collection, Princeton University Library.

naturalistic, as in Louis de Lescleche's *La philosophie expliquée en tables* (Paris, 1652–1653). <sup>16</sup> His three-volume set of bound engraved plates shows the points of philosophy in schematic, tree-like diagrams turned on their side so that we read them left to right, rather than bottom to

In his Sacrorum Novi Testamenti librorum omnium analysis catholica, et oeconomia generalis of 1670,<sup>17</sup> Jacobus à Sancto Michaele also used schematic trees turned on their sides to make systems of divisions and parallelisms. At the left, we read the single summarizing statement; as we progress from left to right, the divisions of the unity are explicated. In the tabula illustrated, an analysis of the Revelation of St. John, Jacobus says at far left that the book contains three parts: preface, tractate, and conclusion. In turn, each of these parts is subdivided yet again. Two of the other tabulae analyze the New Testament as a whole, and one sets out Roman Catholic doctrines in a hierarchy. All the remaining sheets tabularly explicate the contents of one or more New Testament books beneath a short prose synopsis in large italic type.

In the system of artificial memory, the images were the substance to be recalled and their place was important, but secondary. Over time, subject matter embodied in images became known by place in series—in other words, by topic, a word which comes from the Greek *topos*, meaning place. Similarly, arrays of topics were considered to be *tabulae* which in their entirety provided a key to further knowledge.

One example of such a *tabula* is a late 15th-century book of only 18 pages headed *Tabula Christianae religionis*. <sup>18</sup> The closely printed text covers all the essential points of faith: the Apostles' Creed (complete with an Apostle's name next to a point to serve as a mnemonic), the Ten Commandments, the Lord's Prayer, the Seven Sacraments, the Seven Cardinal Virtues, the Seven Deadly Sins, the Seven Ages of Man, the Six Eras of the World, important feast days, and the like. No images are included. At least nine editions of the *Tabula Christianae religionis* are known, all undated and with no indication of printer. Most of them are thought to have been printed in Italy between ca. 1485 and ca. 1520.

 $<sup>^{16}</sup>$  Purchased on the Zabriskie Fund in 1983, its Library call-number is (Ex) B1889.L4 P5.1651.

<sup>&</sup>lt;sup>17</sup> Published at Lyon by Antoine Jullieron, and purchased in 1987 on the Sanxay Fund. Its Library call-number is (Ex) BS2355.S23.

<sup>&</sup>lt;sup>18</sup> It was purchased on the Reed Fund in 1986. The Library call-number is (Ex) BX1754.T32.1495s.

Given the simplicity of both content and language, this was just the sort of book appropriate for a wide and general audience. It could have been used by clergy for training new clergy or instructing the laity. Similarly, it could have been used by laity to help them learn the basics of the faith, or when teaching other laity, as a household master would have taught servants. Such a book was the companion to missal and breviary, both of which are essential for the outward demonstration of inward faith; it would also supplement Italian vernacular literature such as saints' lives, which played a major role in the religious life of ordinary clergy and laity alike. Because tabulae like the Tabula Christianae religionis were undoubtedly heavily-used, their casualty rate

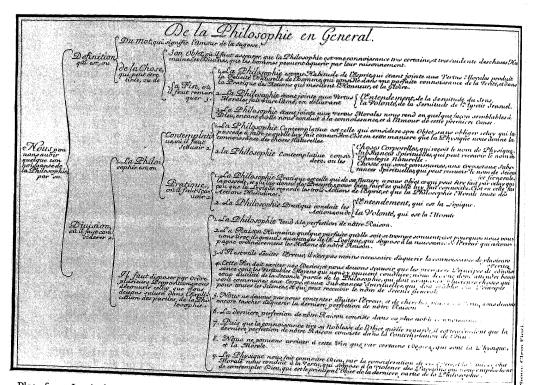


Plate from Louis de Lescleche, *La philosophie expliquée en tables* (Paris, 1652–1653). Rare Books Collection, Princeton University Library.

might have been high, much higher, perhaps, than the 10 to 25 percent estimated loss of all books produced during the 15th century. 19

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Both figural and non-figural *tabulae* as understood in the Middle Ages and the Renaissance have all but vanished from the modern world, in part, perhaps, because the sheer quantity of knowledge has increased to the point where no tabular synopsis can pretend to present even one of its divisions. Nonetheless, earlier *tabulae* attempted ambitious synopses of large segments of sacred or profane knowledge. Jean Boulaese's scope was nothing less than the entire span of time. His 16th-century *Tabula chronographica ex collatione temporum Hebraeorum*, *Italorum*, *Chaldaeorum*, *et Aegyptiorum* is a peculiar chart, and probably unique.<sup>20</sup>

Boulaese was born about 1540 in the parish of Arrou near Courtalain. In 1611 one writer described him as the "fiery Boulaese." His life seems to have been filled with strife. He entered the priesthood in 1556 and took vows of poverty in 1568. A professor of Hebrew, he became principal of the Collège de Montaigu, but the position proved difficult to hold. Between 1568 and 1571 Boulaese seems to have been in Rome in order to present to Church officials details of the 1566 exorcism of a demon from a young girl in the Cathedral of Laon. Upon his return, Boulaese learned that his position as principal had been challenged by one Jean Margot; the dispute was not settled until 1578 in Boulaese's favor. Boulaese then proceeded to impose a change on the Collège, ordering that it be a school for the religious who had taken vows of poverty, and calling himself "father of the religious poor." This action did not please the wealthy regents of the Collège. In the end Boulaese lost, was condemned for obstinacy, and was excommunicated in 1579.

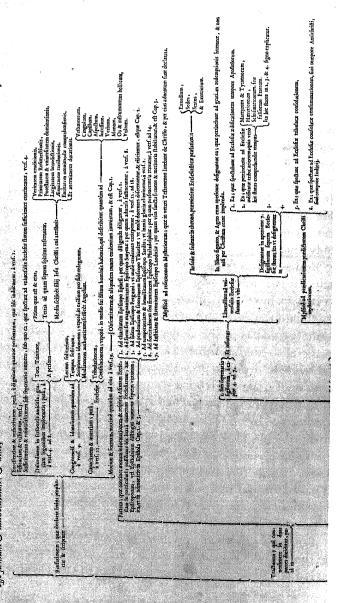
Boulaese published a number of books which were highly esteemed in their day. His mainstay was an account of the exorcism performed at Laon. This account first appeared in 1573 and again in an expanded

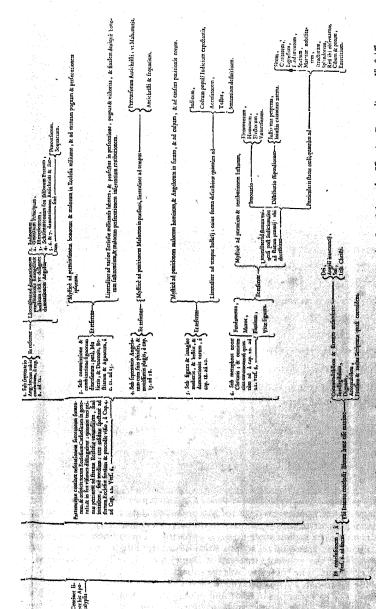
<sup>&</sup>lt;sup>19</sup> Rudolf Hirsch, *Printing*, *Selling*, and *Reading*, 1450–1550 (Wiesbaden: Otto Harrassowitz, 1967), p. 11.

<sup>&</sup>lt;sup>20</sup> Boulaese's chart was purchased on the Reed Fund during 1981–1982. Its Library call-number is (Ex) D11.B68e.

# Apocalypsis Beati Ioannis Apostoli Analysis & Oeconomia Generalis.

Qualis sti in boc prophetati libro Apostoli scopus, sain pates; aperire nempè totius Ecclestacensum & statum futurum: sue quantiun ad prospera; sua descrita motabisiona: pustà, à fundatione Ecclesta et consumentionem scourcienter in tres partes libre diuidius; cot oridelices en prostationem; qua continet praembulum; in narrationem; qua continet processum. E conclusionem; qua declarat librum esse fire firmum E authenticum: E hinc.





Illufriffm Generalis 38 Nousm Testamenium see finiebas D. Iscobus à S. Adichaële , Prior Abbasis Pinerolienses, & in eadem Vie D.D. Vercellense Epsteope & Abbase , seu Predense 1670.

Photo: Clem Fior

form in 1578 and in 1598; Princeton has both versions of the story issued during the 1570s. In addition to this, Boulaese published a commentary on Daniel, books on Hebrew, and another Biblical work. Unrecorded and published during Boulaese's turbulent years of the 1570s is his *Tabula chronographica*.

Boulaese's *Tabula* lays out in non-figural detail four time systems: the Biblical (based on the genealogy of Christ as given in Luke), the Roman, the Babylonian, and the Egyptian. He names his sources, including among them Philo, Berosus, Metasthenes,<sup>21</sup> Manethos, Eusebius, and Jerome. According to Boulaese's chartings, all systems demonstrate clearly that 3,960 years had passed from the creation of the earth to the birth of Christ. As Boulaese points out at the end of the table's dedication to René de Birague,<sup>22</sup> his chart is intended to aid Christians engaged in acquiring the "sacred things." In the dedication he also expresses his interest in eschatological matters (anagogicus).<sup>23</sup>

The eschatological import of the *Tabula chronographica* is of particular interest. It is known that Boulaese was concerned with the Second Coming of Christ. In his *Ad mysticos sacrae scripturae sensus varia dictionum significatio in compendium collecta . . . cum vera demonstratione Septuaginta, Hebdomadum Dan.9*, published in Paris in 1575, he mentions the star of 1572: "From the 11th or 12th of November 1572 up to this day on which I write, the 22nd of November 1574, two entire years and 11 days have occurred since the day the new star appeared. It is not certain what this signifies, but it is possible, as the Scriptures say, that it indicates the Second Coming."<sup>24</sup>

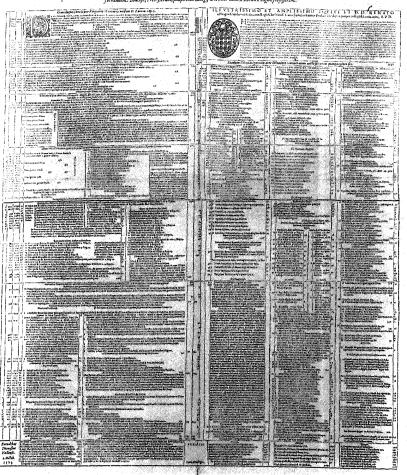
The name Metasthenes is said to be a corrupt spelling of Megasthenes, a Greek who wrote ca. 300 B.C. about India.

<sup>22</sup> Birague was Keeper of the Seals for the French Court, Bishop of Lavaur, cardinal, and one of the prominent Catholic leaders who agreed to the Massacre of St. Bartholomew's Day in 1572.

\*\* For a brief discussion of anagogicus see Anna C. Esmeijer, Divina Quaternitas: A Preliminary Study of the Method and Application of Visual Exegesis (Amsterdam, 1978), p. 9.

24 The passage quoted appears on page 70: "Ab undecimo aut 12 die novembris 1572 ad hanc diem qua haec scripsimus vigesimam secundam mensis nov. 1574 sunt duo anni integri et undecim dies ex quibus stella nova ... apparuit ... nec tamen quid significet adhuc vulgo certum est, licet quidam scriptis editis dicant significare secundum Christi adventum." Moreover, the 70-weeks material of Daniel 9 has long been considered to relate to the "End-Time." The "new star" was the supernova of 1572 described by Tycho Brahe in his *Progymnasmata*. Tycho observed the star from November 1572 until March 1574. "His records of its variations in color and magnitude identify it as a supernova"; see C. Doris Hallman, "Tycho Brahe" in *Dictionary of Scientific Biography* (New York: Charles Scribner's Sons, 1970) Vol. 2, p. 403. Moreover, "... consideration of the abservation, led him to conclude that the new star was neither sublunar nor attached to the

### TABVIA CHRONOGRAPHICA EX COLLATIONE TEMPORVM HEBRAE-ORYM, JTALORYM, CHALDEORYM, ET ÆGYPTIORYM, SECVENDENDE FIBEL Centullyke. Johnstein de Miller of Control Control Control Control Control Control Control Control Control



Jean Boulaese, Tabula chronographica ex collatione temporum Hebraeorum, Italorum, Chaldaeiorum, et Aegyptiorum (Paris, 1574). Rare Books Collection, Princeton University Library.

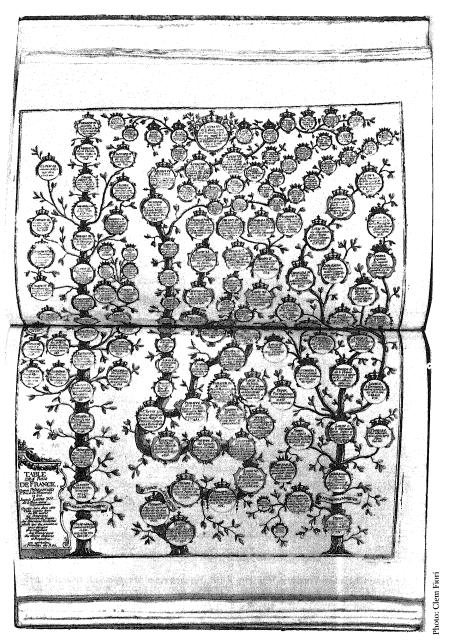
planetary spheres. It lacked the proper motion of a comet (which, according to Aristotle, would have been sublunar), quite apart from its totally different appearance. Despite attempts he made in his book to ascertain the astrological significance of the nova, his account is, on the whole, greatly superior to contemporary accounts;" John David North, "Tycho Brahe" in *Biographical Dictionary of Scientists* (New York: John Wiley, 1982), p. 78.

In his Tabula chronographica, Boulaese is at pains to demonstrate that his estimate of the time that had passed from the creation of the world to the birth of Christ was correct. Why such anxiety over fixing the precise number of years? And why 3,960? As C. A. Patrides points out. during the Renaissance there was a distinct received tradition that the world would last no longer than 6,000 years.25 But determining where one was in that sequence of 6,000 years was not a simple matter. The learned of the age knew that the Second Coming was near, but how close? Over 100 writers of Boulaese's period agonized over this question, presenting more than 40 separate solutions to the problem. Luther, for example, chose exactly 4,000 years. The learned Joseph Scaliger settled on 3,948. The variations depended in part on the source of one's information. If one selected the Septuagint, then at the time of the Renaissance the world was at least 6,500 years old. This was some 500 years past the "due date" and the world had not yet ended. So, for some, the chronology of the Septuagint contained an error, and the answer to the question must lie elsewhere.

Boulaese, like others, chose Luke's recounting of the forebears of Christ as his primary authority; the 42 generations listed there worked out nicely to 3,960 years. Moreover, given the authority of Luke, the chronologies of the Romans and others could all be shown to agree with the Bible. In Boulaese's Tabula chronographica, columns two, three, and four to the right of the listing of Luke's 42 generations show in detail the parallels as well as the sometimes arbitrary adjustments required to make the chronology work out.

The Tabula chronographica has its original imprint canceled by a pasted-over square of paper. Underneath it reads "Apud Thomam Belot, sub D. Barbarae signo, in via Iacobaea." Belot held a 10-year royal privilege granting exclusive rights to the works of Boulaese.26 Apparently Belot wished to disassociate himself from Boulaese; he sold the publication to Denis Duval, whose name as printer/publisher appears in the lower left corner. Exactly why Belot ended the relationship (he never published a Boulaese work again) is not known. Certainly Boulaese's life was in turmoil in 1573, and he had his detractors.

<sup>25</sup> C. A. Patrides, "Renaissance Estimates of the Year of Creation," in Huntington Li-



Jean Joseph Lionnois, *Tables généalogiques*, et géographiques (Nancy, 1771). Rare Books Collection, Princeton University Library.

brary Quarterly, Vol. XXVI, (1962–1963), pp. 315-322.

25 Imprimeurs & libraires Parisiens du XVIe siècle. Ouvrage publié d'après les manuscrits de Philippe Renouard par le Service des Travaux historiques de la Ville de Paris avec le concours de la Bibliothèque nationale. Tome Troisième (Paris, 1979), p. 252.

3.5 EINER MAPPEMONDE LITTERAIRE PROSPECTUS THEOLOGIA. JURISPRUDEN MEDICINA MATHREES MISTORIA PHILOLOGIA. HIEROGRAPHIA. IUS CIVILE LOGICA ANTHROPOLOGIA ARITHMOLOGIA ISTORIA LITERARIA Mails Polygists. Logist cornul. Linguis sink Ant registed. Veneda, Veneda Propos Aida Obrecia PATHOLOGIA IUS CRIMINALI SCELESIATION PATRISTICA tiotorelita Particularia Escriberges Undireca Happelica Commenterii, Impre | Picconici, res | Imples. ETBICA. IUS NATURAE JUS STUDALS, IUS GENTIUM PROPANA BOLDHICA POLITICA PHYSICA. US ECCLESIANTE BIOGRAPHIA Eveneue [ is topical. Ball [ is person. HARAIO. Fredrick Fredrick Books Lendon Suches Suches Crystalics INE SORFICOR PORSIS.
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Line ment. no de una patria Possa Hamaira des nos construir de la Victoria del Milano Kontrali Digina Photo: Clem Fiori

Page from Christian Frederic Wilhelm Roth, Versuch einer Mappemonde litteraire (Erfurt, 1785). Rare Books Collection, Princeton University Library.

Be fu er t 3 f 1, Weeter ber tobene bent liebliegel

And in the 16th century, as Anthony Grafton points out,27 chronology could make tempers flare. It was a subject fiercely argued. Moreover, the authenticity of one of Boulaese's sources, Berosus, was debated by a number of scholars; perhaps Belot decided to distance himself from Boulaese because of such doubts regarding his sources.

Whereas Boulaese took the entire span of time as understood in theological terms, others sought to expand the tabular form to encompass all of human history, or the entire world of letters. Two 18th-century books recently acquired by Princeton provide examples of such an effort as well as a glimpse of the moment of transition, when an old intellectual age was dying and a new one was being born. Jean Joseph Lionnois' Tables généalogiques et géographiques28 cover established knowledge, such as Biblical history. Each plate is dedicated to Louis Philippe Joseph Orléans, Duke of Chartres. The entire book has all the marks of one produced in the age of patronage, and it is officially approved and licensed. Its contents are laid out in the well-known tree form, as shown in the genealogy of the Kings of France.

Christian Frederic Wilhelm Roth's Versuch einer Mappemonde litteraire (Erfurt, 1785)29 offers an interesting contrast. Roth covers the whole range of knowledge. He charts a Mappe-monde Litteraire—"Map of the World of Letters." He does so using a columnar arrangement, with each column filled with text and disposed left to right across the page. There are no images on the tabula, only text. In Roth's thinking, "Letters" is the total intellectual culture of humankind, not just philosophy, theology, and the genealogies of kings. Significantly, financial backing for the book did not come from a single patron, but from a group of subscribers. True, the list is headed by eight members of the German nobility, but they are far out-numbered by the more than 150 others on the list. These others are lesser men: merchants, booksellers, kappellmeisters, and so forth. From both the list of subscribers and Roth's ambitious attempt to represent all the new knowledge of his time, we get a glimpse of the democratic age arriving, an age when knowledge

<sup>&</sup>lt;sup>27</sup> Anthony Grafton, "From De Die Natali to De Emendatione Temporum: The Origins and Setting of Scaliger's Chronology" in Journal of the Warburg and Courtauld Institutes, Vol. 48 (1985), pp. 100-143.

<sup>28</sup> Published at Nancy in 1771, it was purchased on the Sanxay Fund in 1985. Its Library call-number is (Ex) D11.L76e.

<sup>&</sup>lt;sup>29</sup> The Library's call-number for Roth is (Ex) Z2000. R67 1785f. It was purchased in 1986 on the Theodore F. Sanxay Fund.

would be transmitted by means more accessible to the comman man, unversed in the systems and schema of "artificial memory" and the often esoteric meanings of emblems.

Princeton's recent acquistions of complex visual arrays known as tabulae provide a glimpse into a vanished world—a world that depended on images and memory to teach, to remind, and to edify.

# Dora Marsden's Feminism, the *Freewoman*, and the Gender Politics of Early Modernism<sup>1</sup>

BY CAROL BARASH

It is one of the quirks of women's history that a woman's name change through marriage can make her, seemingly, disappear. Along with a family name, important papers can also disappear. The early records of the *Freewoman* and the *New Freewoman*, feminist journals published in London between November 1911 and December 1913, were temporarily lost to view through just such circumstances.

A problem in the history of early modernist literature led to their rediscovery. According to a well-known story, Ezra Pound was responsible for transforming the *New Freewoman*'s concerns "from feminism to literature" when he placed Richard Aldington as the journal's literary editor in the fall of 1913. Doubting the story's veracity, I went in search of information about the two years prior to Pound's takeover,

' I am indebted to the Council for European Studies for providing a grant to complete research in England, and to Mrs. Elaine Bate who allowed me to read the papers of Dora Marsden and the *Freewoman* group in her personal collection. I would also like to thank Victoria Glendinning; Jane Lidderdale; A. Walton Litz; Dr. Peter MacNiven, John Rylands University Library, University of Manchester; Ellen Shipley, University of Arkansas Library; Elaine Showalter; Ann Van Arsdale, Rare Books and Special Collections, Princeton University Library; and Marjorie Wynne, Beinecke Rare Book and Manuscript Library, Yale University.

<sup>2</sup> The phrase is from Louis K. MacKendrick, "The New Freewoman: A Short History of Literary Journalism," English Literature in Transition, Vol. 15 (1972), pp. 180-188. See Michael Levenson, A Genealogy of Modernism (Cambridge: Cambridge University Press, 1984), especially Chapter 5; James Longenbach, Modernist Poetics of History: Pound, Eliot and the Sense of the Past (Princeton: Princeton University Press, 1987); and Sanford Schwartz, A Matrix of Modernism: Pound, Eliot and Early Twentieth-Century Thought (Princeton: Princeton University Press, 1985) for information about modernism's relationship to larger intellectual shifts; and Sandra Gilbert, "Costumes of the Mind: Transvestism as Metaphor in Modern Literature," in Elizabeth Abel, ed., Writing and Sexual Difference (Chicago: University of Chicago Press, 1982), pp. 193-219, for the subtext of gender politics.