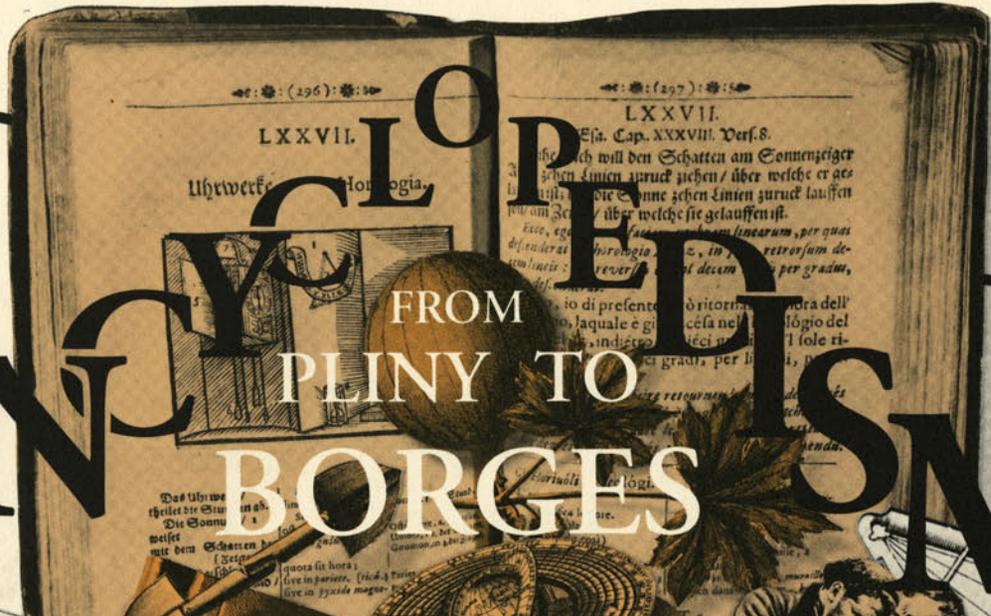


# ENCYCLOPEDIA FROM PLINY TO BORGES

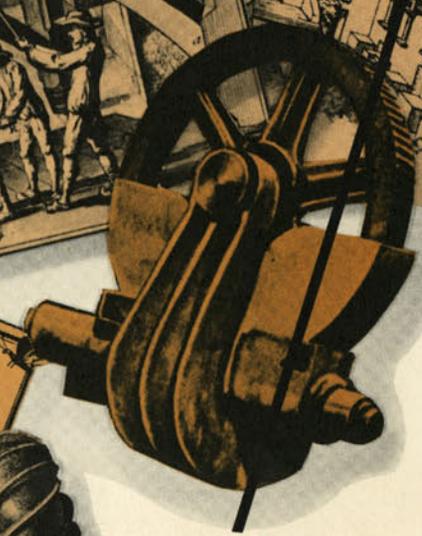


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tur. In primo angulo superiori  
tur, Vniuersalis dedicatiua  
angulo, Vniuersalis. abd  
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dicatiua: ad angulum re  
dicatiua. Deinde duo  
vniuersali dedicatio  
nam, & ab vniuers  
em dedicatiam.



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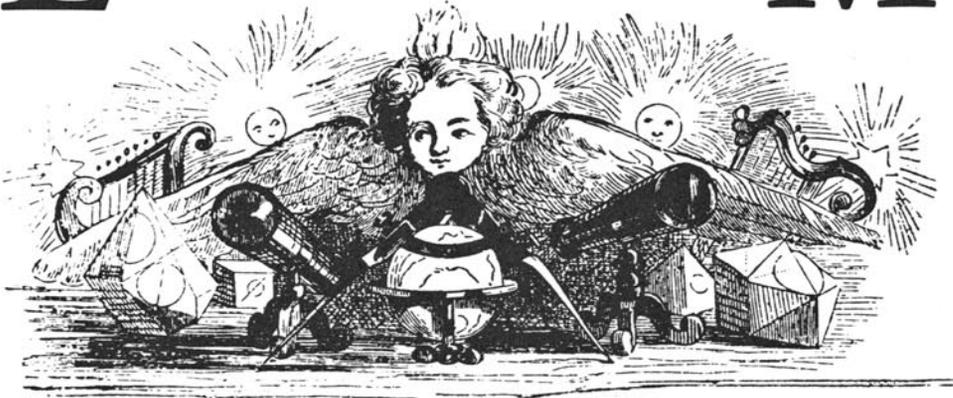


Arnar

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Encyclopedism from Pliny to Borges,

# ENCYCLOPEDIA FROM PLINY TO BORGES



THE UNIVERSITY  
OF CHICAGO  
LIBRARY, 1990

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1990

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Written by Anna Sigrídur Arnar  
Produced by Kim Coventry  
Designed by Cynthia Susmilch, and Jeff Hall

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*In Memory of*

ROBERT ROSENTHAL

1926-1989 *Curator of Special Collections*



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# ACKNOWLEDGMENTS

The conception and planning of an exhibition provide an unusual occasion to explore the intellectual breadth and physical variety of the rare book collections. Encyclopedism, with its chronological sweep and fascinating interdisciplinary connections, offers an especially engaging point of departure. While presenting a chance to display a choice selection of the library's printed riches, encyclopedism also raises a wide range of intriguing questions about the nature of human knowledge and the forms in which learning has been codified and expressed in the course of Western culture. Robert Rosenthal understood that such an exhibition could focus and synthesize understanding of a crucial aspect of the collections as it opened and illuminated new avenues for further examination and research. In developing the theme of "Encyclopedism," he was able to draw on his detailed knowledge of the history of the printed book as well as his remarkable memory of the strengths and nuances of the library collections he had built over more than thirty-five years. He also saw an opportunity to expand and enrich the holdings, and it was thus characteristic that among the last books he acquired in Scotland before his death was a copy of the *Encyclopaedia Metropolitana* purchased specifically for inclusion in this exhibition. As the last of the many exhibitions he shaped over the course of his lengthy and productive career in Special Collections, "Encyclopedism from Pliny to Borges" is a fitting summation of Bob Rosenthal's creative energy, unflagging imagination, and steadfast dedication to the ideal of the book.

This exhibition, like all others, represents a complex, one might say nearly encyclopedic, collaboration of effort. Barbara Stafford and Paolo Cherchi provided essential advice and support in the development of the exhibition. Anna Arnar had the responsibility for surveying a vast array of literature, selecting each of the books displayed, and refining the themes in a perceptive and suggestive text. Kim Coventry effectively directed the production, editing, and installation of the exhibition and the development of the catalogue. Sem Sutter offered the benefit of his bibliographical expertise and a careful reading of the manuscript. Mary Tait typed the text and attended to revisions in the draft with dispatch. And for the effective design and realization of the catalogue, we are indebted to Cynthia Susmilch and Jeff Hall.

Daniel Meyer, Acting Curator



# PREFACE

It is commonly assumed that the French *Encyclopédie* inaugurates what we now call encyclopedias or encyclopedic dictionaries. Like many common assumptions, this is only partly true. The *Encyclopédie* which D'Alembert and Diderot began publishing in 1750 was the first great encyclopedia undertaking to use the alphabet as a taxonomic principle, although G.V. Coronelli had started a similar enterprise at the beginning of the century which was never completed. The *Encyclopédie* was also a work that had a clear ideological program, and one which profoundly affected the culture of its day. But the *Encyclopédie* is just one piece, important though it is, in the long and varied history of encyclopedias. Indeed the idea of encapsulating knowledge in a handy tool such as a book or series of books has always been appealing, and this may be the ultimate reason why encyclopedias have outlasted many other kinds of popular works (epic poems, books of chivalry, etc.). The problem, however, is knowledge itself. What is it? We can say that knowing how many kinds of trees there are is knowledge, but it is of a different sort from the knowledge acquired by classifying these trees, putting them in relation to other elements of the earth and of the universe, or seeing them as different symbols, or even reasoning about the principles which organize our way of presenting all these relations. In other words, encyclopedias, besides providing information, may aspire to shape a view of the world and the disciplines which study it. These attempts account for the enormous differences which characterize the history of encyclopedias. Consider, for examples, Pliny's *Naturalis Historia* and compare it with St. Isidore of Seville's *Origines* or *Etymologiae*. Pliny conceives of encyclopedia as an ongoing research (*historia*) into all natural phenomena which he classifies into broad categories such as Astronomy or Zoology. In the *Naturalis Historia* there is no real concern with the unity of the world nor with the relation among disciplines. As we start reading Isidore we sense immediately a religious concern and are surprised by the fact that this encyclopedia starts with a book on grammar; but the surprise soon vanishes as we understand that language is the basic tool of knowledge. For Isidore, if we know the names we may grasp the essence of things because etymology traces names and things back to their Creator. All knowledge is unified through the method of etymological research. Isidore's work was very influential throughout the Middle Ages which produced many encyclopedias. Typical titles for these works are *De rerum proprietatibus*, or *De naturis rerum*, or *Speculum* because their authors systematically sought out "the qualities" or "the essence" which God deposited in things; and only when this "second hidden language" is decoded can one see how the multiplicity of things mirrors the totality of God.

The Renaissance and Baroque periods saw the problem of encyclopedias as primarily a logical one. They were fascinated by the possibility of grasping the secret of the "machine of the universe." These centuries teem with works bearing titles containing words such as "Theater," "Fabrica," "Garden," "Panopticon," "Syntaxis," etc., all metaphors indicating the gathering of all things in a reduced space so that the structures of the universe could be visualized. Their ambition was "to give order to the order," that is to reduce to logical structures the hidden order of the world. The revival of the art of memory; the great attention paid to the problem of *methodus*; the multiplication of works called "silvas" meant to represent the confusion and fragmentation of the world; the proliferation of "hexaemera" – that is, works which seek

to epitomize the universe by following the seven-day creation scheme; the vogue of catalogues and polyantheas; the creation of art galleries and *Wunderkammer*: these are all direct or indirect products of this intense love affair with the idea of encyclopedia. Even the name “encyclopedia” was coined in these centuries to mean “teaching in cycles” or “general education.”

The collapse of this project, which was essentially tied to the notion of an immobile, unchanging world, brought about the search of a new taxonomy, in which the alphabet supplanted logic. Such a new organization required the active collaboration of the reader who was forced to reconstruct his knowledge as he moved from one article to another. By moving away from grandiose philosophical principles the *Encyclopédie* broadened its popular appeal, but also committed its successors to vastly increased expenses; whereas before, a single author could write a whole encyclopedia, now a team of specialists was needed. Subscribers had to be found to finance the work, and publishers felt obliged to bolster sales by hiring illustrators and technical designers. The philosophical encyclopedia had its theoretical revival during Romanticism (Hegel, Novalis) and Positivism (Comte), but it never produced a really successful work. Today’s encyclopedia follows the model of the *Encyclopédie*, although it has lost the ideological purpose of its predecessor, except in proliferation of petty specialization such as encyclopedias for hunters, cat-lovers, bankers, and the like. Nobody believes any more that an encyclopedia can reconstruct the world for us; in fact, a writer like J. L. Borges can make fun of projects aiming at encompassing all knowledgeable things. Perhaps this is the reason why we still use encyclopedias: not for knowledge but for information; we can read an article in the *Encyclopaedia Britannica* without asking ourselves if we are looking at a leaf of the tree of knowledge.

This exhibition was conceived as part of a conference on encyclopedias and their impact on other cultural forms, a conference that Professor Barbara Stafford and I had planned. Anna Arnar, by selecting the materials, has highlighted some moments and modes in which encyclopedias have influenced literature and the arts. Her descriptions relieve me of writing on this subject; she has written a first brilliant chapter of a book which many of us would like to read.

Paolo Cherchi

# INTRODUCTION

The focus of this exhibition is encyclopedism, which is defined here as the attempt to organize a comprehensive body of knowledge. The books in this exhibition, selected from the collections of the University of Chicago Library, demonstrate the variety of forms in which encyclopedism has been expressed throughout Western history. The dictionary, the poem, the philosophical dialogue, the popular journal, the treatise, the catalogue, the library, the museum – each may be seen as a manifestation of a common impulse to describe and communicate all that can be known.

While the books selected for this exhibition are not intended to form an exhaustive or chronological survey, they serve to demonstrate that the production of an encyclopedia is not a natural process but a deliberate and artificial ordering of knowledge that reflects a particular world view. The methodological and ideological conflicts inherent in a comprehensive project such as an encyclopedia are rarely apparent in the final product, which appears in print as a polished, seemingly cohesive text. In reality, the self-confident structure and assured prose of the typical encyclopedia mask the frequently arbitrary, sometimes impassioned, debate which has produced its selection and organization of ideas. This internal conflict often turns on the tensions between the intellectual content of an encyclopedia and the organization which structures this content. In its most idealized form, the encyclopedia would provide both a comprehensive survey of human knowledge and a methodological model for interpreting it, yet most encyclopedias achieve one goal only at the expense of falling short of the other.

A variety of methods have been used to communicate and organize knowledge in encyclopedic projects. The incorporation of illustrations into the body of the text was one approach. Dialogue was another technique, sometimes expressed in a conventionalized conversation that would educate the reader as the text unfolded. The concept of a three-dimensional encyclopedia marked another development as the popularity of museums and libraries spread throughout Europe from the sixteenth century onward. Many individual collectors as well as institutions of state and church were inspired by the visionary scope of encyclopedism; they forsook the writing of comprehensive volumes and threw their efforts into amassing comprehensive collections of three-dimensional objects. The process of choosing and acquiring artifacts, like the accumulation of facts in a printed encyclopedia, often became an end in itself.

Encyclopedism has also been expressed in the form of the literary narrative. Works such as Dante's *Divine Comedy* or Goethe's *Faust* personify the encyclopedic quest by providing a comprehensive survey of human experience in narrative form. They also embody the ontological imperative of encyclopedism: mankind's drive "to know" is impelled by the desire to define his role in the universe. More recently, however, literary works such as Borges's *Ficciones* challenge the very notion of encyclopedism. Other criticisms, which range from light-hearted farces to scathing diatribes, parody the perpetual quest of mankind to impose an order upon the universe.

Given the remarkable range of genres and the great number of possible examples, not every form of encyclopedism could be discussed in this exhibition. The contemporary encyclopedia, for example, is omitted because it tends to conform

fairly closely to conventional nineteenth-century models. At its most unimaginative, today's standard encyclopedia has been reduced to little more than a catalog of discontinuous information. Two other important genres are also not treated. The encyclopedic tradition of the Eastern hemisphere is a vast theme unto itself and would require more careful consideration than could be given in this space. Indeed, some of the most celebrated encyclopedias have been produced in China, Egypt, and Persia, all offering additional perspectives on the ordering and classification of knowledge. Likewise, apart from a few examples, this exhibition has not fully considered the development of specialized encyclopedias. These works range from comprehensive treatments of narrowly defined subjects, such as Buffon's *Histoire naturelle des oiseaux*, to the ambitious and unfinished *International Encyclopedia of Unified Science*, a monumental work conceived by Otto Neurath in the 1920s and 1930s and published by the University of Chicago Press.

As ancient and modern literary forms are re-examined, the subject of encyclopedism should continue to invite scrutiny from scholars in many disciplines. Embodying as it does the fundamental beliefs concerning the role and limitations of knowledge, encyclopedism lies at the crossroads of history, philosophy, literature, art, and science.

1 THE *SUMMA*

The very meaning of the word *summa* describes the goal of most encyclopedias: it is a summation of knowledge presenting a particular view of the world both comprehensively and systematically. It is simultaneously an index of accumulated knowledge and a model which proposes a method for the organization of this knowledge.

Abstract systems and the actual subjects being systemized are not always compatible. The drive to be comprehensive, or to include particular information, often foils the overarching system of classification. Conversely, abstract treatises on the systemization of knowledge tend to preclude particular and idiosyncratic information. Moreover, the absolute systemization of knowledge demands a certain uniformity of thought and language which, in turn, requires a homogeneous audience. While these epistemological barriers have prevented the realization of an ideal *summa*, three general types of comprehensive works are discernable:

1) The “meta-encyclopedia” is an outline for the organization of knowledge but does not implement it; it is a theory for an encyclopedia without the specific contents of an encyclopedia. This disparity between the theory of an encyclopedia and its actual realization is most clearly evident in the *Encyclopaedia Metropolitana*. This nineteenth-century encyclopedia was to include an ambitious epistemological plan devised by the poet Samuel Taylor Coleridge, but the final product (cat. 5) was not able to implement this plan.

2) A second type of *summa* is one that crystallizes the ambitions of a certain age or school of thought. These treatises are generally addressed to particular audiences: Vincent de Beauvais’s *Speculum maius* (cat. 8), for instance, was a comprehensive presentation of knowledge available in the mid-thirteenth century tailored for a Western audience of church authorities and monastic scholars, while Johann Heinrich Alsted’s *Encyclopedia* (cat. 10) was a compendium of humanist learning written in Latin for a select, erudite audience.

3) The third type of *summa* strives to achieve comprehensiveness and a universal audience. The nineteenth-century encyclopedias like the *Allgemeine Encyclopädie* of Ersch and Gruber (cat. 12) and the *Grand dictionnaire universel* (cat. 11) of Pierre Larousse no longer addressed an audience of monastics or an elite laity, but rather a growing middle class anxious for pragmatic compendia containing all pertinent knowledge. These modern-age encyclopedias represent two major changes in encyclopedism: first, comprehensiveness is no longer possible or desirable; and second, the commercial publishing house, like the one formed around Larousse’s work, replaces the traditional authorities of church, state, or academy in the diffusion and arbitration of knowledge. (Collison 1966, Steinberg)





Fig. 2 *Instauratio magna*

3. Gottfried Wilhelm Leibniz (1646-1716)

*Epistolae ad diversos*

4 vols. Edited by Christian Kortholt

Leipzig: Heirs of Bernhard Christoph Breitkopf,  
1734-1742. Hengstenberg Collection

Gottfried Wilhelm Leibniz was a German philosopher, scientist, mathematician, historian, and diplomat whose breadth of learning and experience were matched by his ambitious plans to establish universal harmony in the field of learning. He promoted cooperation between the fields of science and medicine and, in a century fraught with

religious tension, hoped to unite the diverse Christian sects within a single, cohesive doctrine.

Another fundamental goal for Leibniz was the idea for a universal encyclopedia. As exemplified in his formulations on universal language, Leibniz believed it was possible to reduce divisions in knowledge to fundamental concepts or units. These basic units would function somewhat like the combination of numbers, the field of knowledge becoming a matrix of infinite combinations. Although the universal encyclopedia was a constant theme in Leibniz's writing, he never carried it out. Discussions of a universal *summa* are dispersed throughout his writings, ranging from treatises on method (like the *Nova methodus docendae* of 1667) to cursory notes and letters. This posthumous publication of his letters, however, contains important evaluations of thinkers whose methods have contributed to the formulation of an encyclopedia. (Dierse, Loemker, Vasoli)

4. Georg Wilhelm Friedrich Hegel (1770-1831)

*Encyclopädie der philosophischen  
Wissenschaften im Grundrisse*

Heidelberg: August Osswald, 1827

Emil G. Hirsch-Bernays Library

Gift of Julius Rosenwald

Georg Wilhelm Friedrich Hegel first published his *Encyclopädie der philosophischen Wissenschaften im Grundrisse* (Encyclopedia of the Philosophical Sciences in Outline) in 1817. The second edition exhibited here is an expanded version that still retained the word *Grundris* (outline) in the title, and indeed, the work was a framework for an encyclopedia without its detailed contents.

In this meta-encyclopedia, Hegel devised a system in which all branches of knowledge are subordinate to one discipline: philosophy. This strict hierarchical arrangement reveals Hegel's reaction to the increasing specialization of

encyclopedias in the early nineteenth century. This specificity blurred and fragmented the relationship among disciplines and exaggerated the importance of particular information. Hegel countered this trend by declaring that sub-fields like “heraldry” or “numismatics” were superfluous, mere “aggregates” or accidental phenomena. The “true” encyclopedia, according to Hegel, must embody a system that controls information lest knowledge be reduced to “subjective sensual experience.” Accordingly, the philosopher organized his work in three sections: “The Science of Logic,” “The Philosophy of Nature,” and “The Philosophy of Mind.” These divisions were to include other branches of knowledge, not in their “detailed development,” but limited “to their origins and fundamental principles.” (Dierse)

5. *Encyclopaedia Metropolitana; or Universal Dictionary of Knowledge, on an Original Plan: Comprising the Twofold Advantage of a Philosophical and an Alphabetical Arrangement*  
 Edited by Edward Smedley, Hugh James Rose, and Henry John Rose. 28 vols. London: B. Fellowes, [et al.] 1817-1845. Acquired from the Chicago Public Library by exchange

The prime motivation for the *Encyclopaedia Metropolitana* was to restore the encyclopedia to a cohesive entity by replacing the alphabetic arrangement with a thematic arrangement. Samuel Taylor Coleridge, who developed the initial outline for the *Metropolitana*, claimed that “a huge unconnected miscellany of the *omne scibile* [all that is knowable], in a arrangement determined by the accident of initial letters, an encyclopedia, is the impudent ignorance of your Presbyterian bookmakers.” For the poet-philosopher, a true encyclopedia required a methodological arrangement. His initial proposal called for eight parts whose order was to follow the reader’s evolutionary

development of understanding. It was a *summa* which was to mirror a *process*, not a list of disembodied facts.

Like Bacon’s or Hegel’s proposals (cat. 2, cat. 4), Coleridge’s plan for the *Metropolitana* was more a treatise on method than an actual encyclopedia, making its publication difficult. The publishers began by reducing Coleridge’s eight divisions to four (fig. 3), destroying the links between the different divisions of knowledge that had been essential to his ideal plan. In addition, Coleridge’s evolutionary scheme did not prove to be commercially viable; he had assumed that the work would be read from beginning to end, but the publishers felt forced to issue portions from all four sections simultaneously in order to compete in the encyclopedia market.

The principles of Method, developed in the preceding Essay, will, it is hoped, render perfectly intelligible the Plan of our whole work, which is comprehended under Four Divisions as follow:

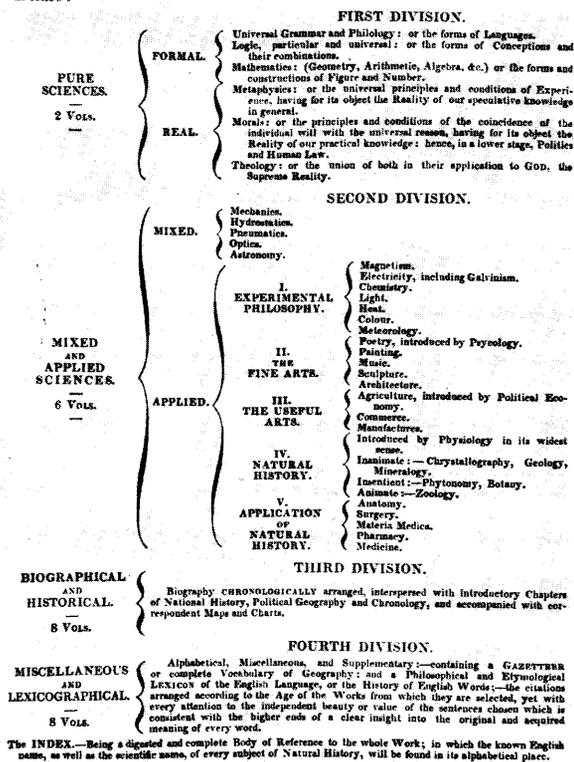


Fig. 3 *Encyclopaedia Metropolitana; or Universal Dictionary of Knowledge, on an Original Plan: Comprising the Twofold Advantage of a Philosophical and an Alphabetical Arrangement*

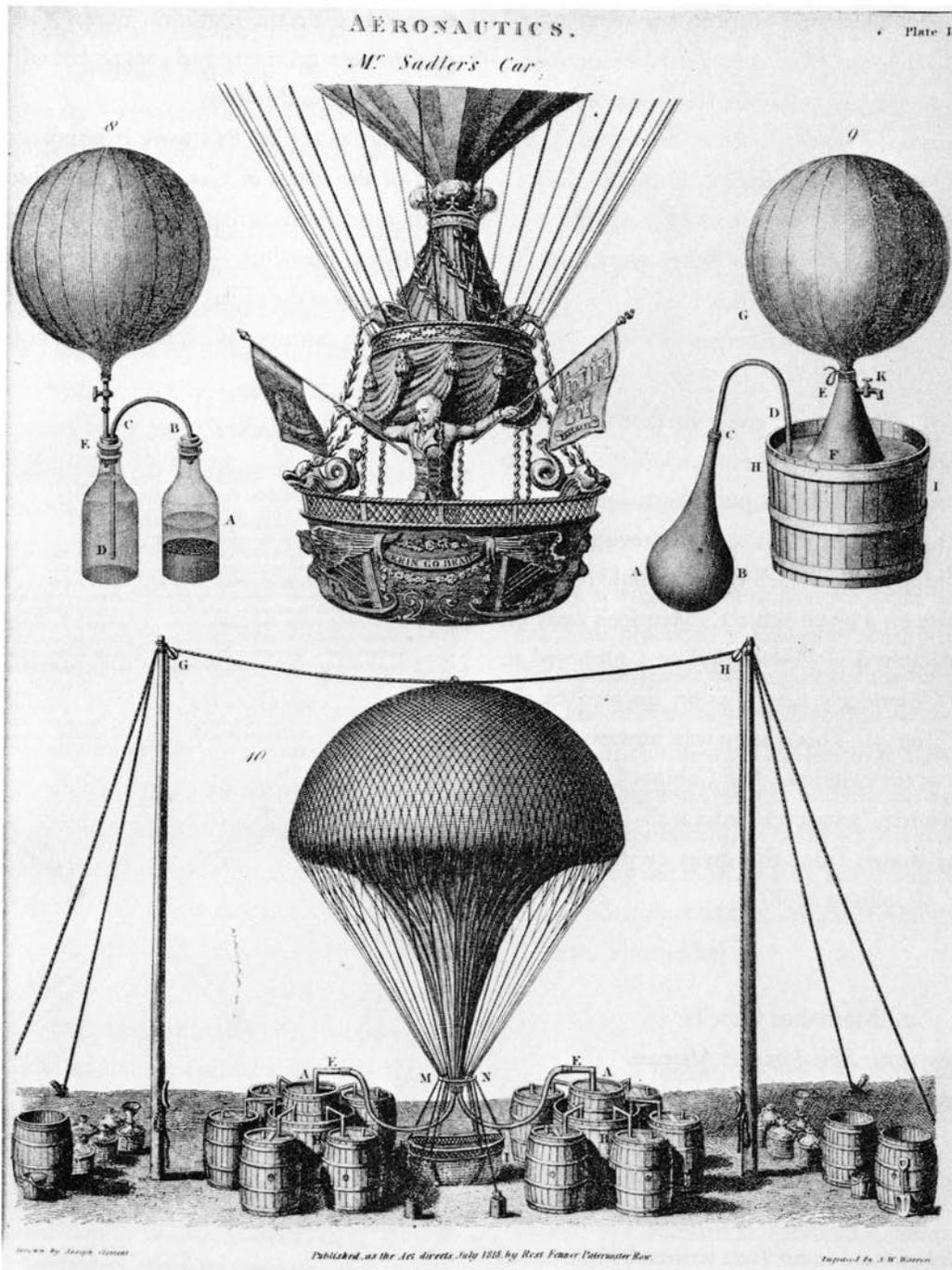


Fig. 4 *Encyclopaedia Metropolitana; or Universal Dictionary of Knowledge, on an Original Plan: Comprising the Twofold Advantage of a Philosophical and an Alphabetical Arrangement*

Despite its general competence and high-quality illustrations (fig. 4), the *Metropolitana* met with a series of editorial and publishing difficulties and was a commercial

failure. A second attempt to publish the *Metropolitana* in octavo format (cat. 6), proved equally unsuccessful. (Collison 1966)

6. Frederick Denison Maurice (1805-1872)  
*Moral and Metaphysical Philosophy, First Six Centuries*  
 Vol. 28 of *Encyclopaedia Metropolitana*; or,  
*System of Universal Knowledge: on a Methodical Plan*  
 Projected by Samuel Taylor Coleridge. Cabinet Edition  
 London: John Joseph Griffin and Company;  
 Glasgow: Richard Griffin and Company, 1848-58  
 Purchased with funds provided by  
 Ludwig Rosenberger

This octavo volume by the Reverend Frederick Denison Maurice was part of an attempt to revive Coleridge's plan for the *Metropolitana*. The new publishers, John Joseph Griffin and Richard Griffin, envisioned this revised version as a Cabinet Edition in which each volume would represent a separate treatise on a given subject. Maurice's essay on "Moral and Metaphysical Philosophy" was supposed to correspond to Coleridge's first division devoted to the "Pure Sciences" (fig. 3). This edition was, however, just as much a failure as the original. The Cabinet Edition was not, as Collison notes, "an encyclopedia at all—it was a series of monographs drawn from the main contents of the *Metropolitana*." (Collison 1966)

### 7. Martianus Capella

#### *De nuptiis Philologiae et Mercurii*

Published with Isidore of Seville, *Originum libri viginti ex antiquitate eruti*. Basel: P. Perna, [1577]. Purchase of the Library's General Book Fund

*De nuptiis Philologiae et Mercurii* was written by Martianus Capella in the early fifth century. It is a *satira* which mixes both prose and verse, its first two books consisting of an elaborate allegory of the marriage of Philology and Mercury. The remaining seven books are "bridesmaids," a term used for the seven liberal arts. Books III-IV represent what in the Middle Ages came to be called the *trivium*:

grammar, dialectic, rhetoric. Books VI-IX are the later *quadrivium*: geometry and geography, arithmetic, astronomy, music, and poetry.

Martianus Capella's work is important as an expression of the ideals of Graeco-Roman education that had been articulated earlier by Varro (116-27 B.C.) in his *Disciplina*, now lost. The tradition of the *trivium* and *quadrivium* as the pillars of education continued up to the nineteenth century. (Collison 1964, Thorndike)

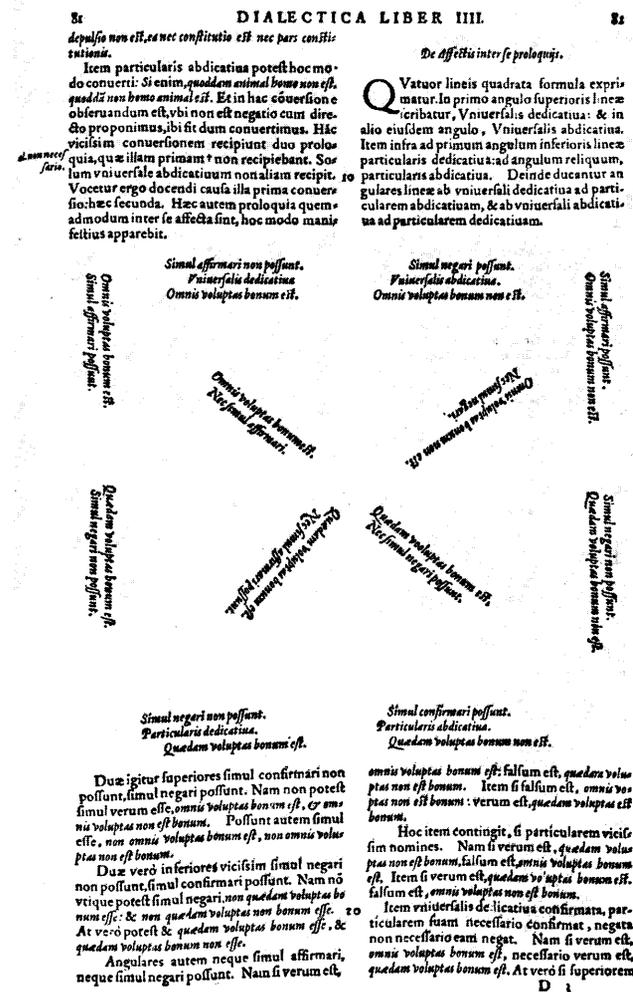


Fig. 5 *De nuptiis Philologiae et Mercurii*

8. Vincent of Beauvais (d. 1264)

*Speculum historiale*

3 vols. [Augsburg, Monastery of SS. Ulrich and Afra, 1474]. Purchase of the Library's General Book Fund

The *Speculum historiale* forms the third part of a larger work entitled *Speculum maius*, written by the Dominican friar Vincent of Beauvais in the mid-thirteenth century. This enormous *summa* was an influential compilation of learning which was eventually translated into French, Spanish, German, Dutch, and Catalan.

The *Speculum maius* comprises three books: the *Speculum naturale*, the *Speculum doctrinale*, and the *Speculum historiale* (shown here). A fourth, the *Speculum morale*, was added in the fourteenth century by an anonymous author. The progression of categories from “naturale” to “doctrinale” and “historiale” reveals a belief in a pre-established hierarchy of divine and natural orders. The “speculum” or “mirror” was to present an image of reality—a reality which Vincent defined in the preface as “all that is worthy of contemplation (*speculatio*) that is, of admiration or imitation.”

Compiled for the use of religious communities, this *summa* was designed to preserve the established intellectual and cultural order. Centuries later, several modern encyclopedias tried to return to a cohesive plan like that found in the *Speculum maius*, but in a pluralistic society this was no longer possible. (Collison 1964, Lawler, Lemoine)

9. Gregor Reisch (d. 1525)

*Margarita philosophica* . . .

Basel: Johann Schott, 1508. Gift of Mortimer Frank

The *Margarita philosophica* (The Philosophic Pearl) was first published in 1496. Like Martianus Capella (cat. 7) before him, the Carthusian prior Gregor Reisch used the liberal arts as the basis for the organization of knowledge,

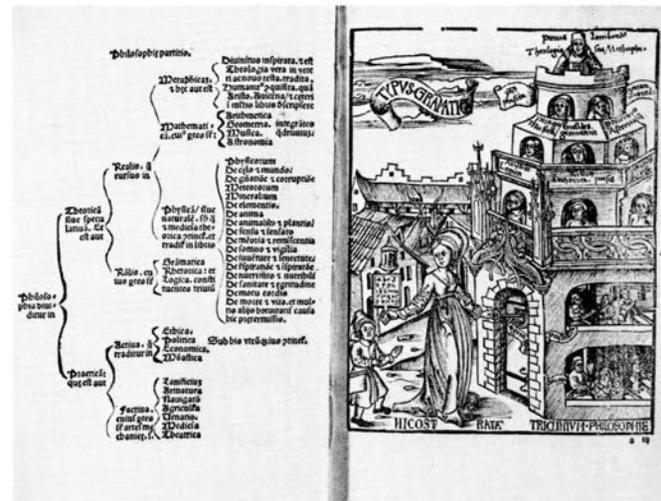


Fig. 6 *Margarita philosophica* . . .

but he arranged them under two larger rubrics, “theoretical” and “practical” philosophy, attempting to respond to the subdisciplines forming in the universities of the day.

The *Margarita* is a pedagogical *summa* embodying an entire curriculum of general learning. Reisch dedicated the work to “ingenuous youth” and intended it to be read in its entirety, expounding its contents in a series of dialogues.

Among the most striking features of Reisch’s work are the wonderful woodcuts, several of which fold out (fig. 6). (Dierse, Thorndike)

10. Johann Heinrich Alsted (1588-1638)

*Encyclopaedia, . . . serie praeceptorum, regularum, & commentariorum perpetua*

Herborn: [Corvinus], 1630

Richard P. McKeon Collection

Johann Heinrich Alsted’s *Encyclopaedia* represents the humanist quest to combine harmony with utility, Christian values with classical learning. The frontispiece (fig. 7) mirrors his ambition: occupying the four corners are the traditional university faculties of theology, law, medicine, and philosophy; the two side panels depict



Fig. 7 *Encyclopaedia. . . serie praeceptorum, regularum, & commentariorum perpetua*

the Christian virtue of *pietas* and the classical ideal of *humanitas*. Acknowledging the role of practical sciences are the mechanical arts in the lower left, and knowledge not readily categorized is represented by *varia* at the lower right. The curious vignette on the top combines the sun and the moon—metaphysics and logic—as emblems of being and method.

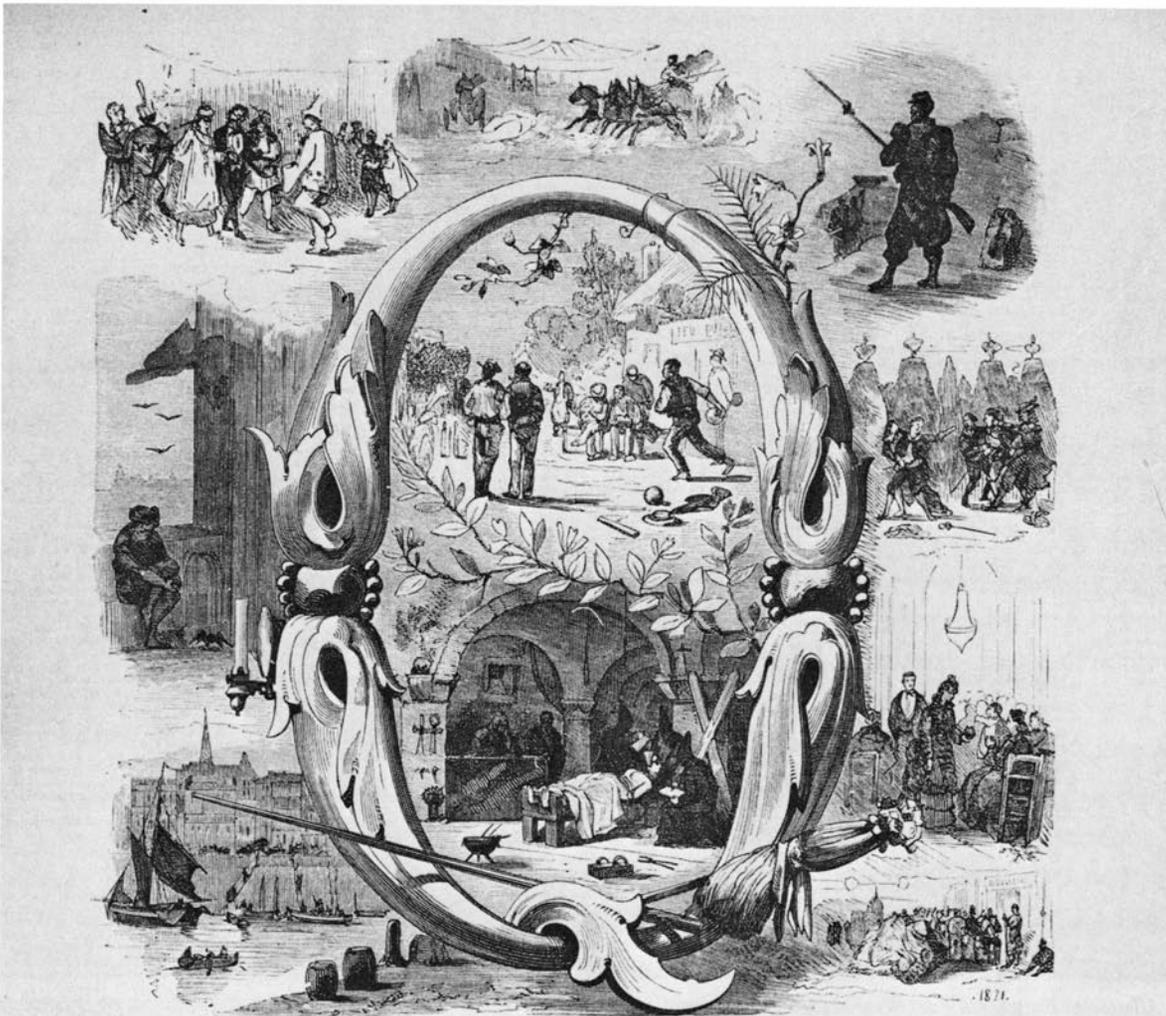
Alsted's *Encyclopaedia* was the last of the voluminous Latin compendia to be organized systematically by subject, but his student, Johann Amos Comenius, pursued his goal of establishing harmony in the realm of knowledge (cat. 38). (Collison 1964, Dierse, Loemker, Thorndike)

II. Pierre Athanase Larousse (1817-1875)  
*Grand dictionnaire universel du XIXe siècle*  
 17 vols. Paris: Administration du Grand dictionnaire universel, 1866-1890. Purchase of the Library's General Book Fund

In the spring of 1864, Victor Hugo wrote to Pierre Larousse, "This is a true monument that you are erecting to the nineteenth century." The poet was referring to Larousse's *Dictionnaire universel du XIXe siècle*, which appeared in seventeen volumes between the years 1866 and 1890.

The word *universel* describes Larousse's desire to create a work that would make knowledge accessible to all. For Larousse, knowledge was not an end in itself but an instrument for social interaction. His ideals set him apart from the tradition of French lexicography which esteemed language in its pure and "proper" form. The *Dictionnaire universel*, on the other hand, embraced the diversity of language and the diversity of its users. "Language has no fixed doctrine," Larousse wrote in the preface, "because it must serve as an instrument for the atheist as for the most devout fanatic, for the most exalted revolutionary as for the opposer of progress, and a type of eclecticism is the only system that can accommodate this."

Like its German and English counterparts—the *Brockhaus* (cat. 28) and the *Encyclopaedia Britannica* (cat. 51), Larousse's work became an enduring commercial enterprise, its first edition selling an estimated 150,000 copies, securing a success which endures to this day. (Collison, McArthur, Rey 1989, *Siècle des dictionnaires*)



**Q** *q.* m. (ku, suivant l'ancienne épellation, ka, suivant la nouvelle). Dix-septième lettre de l'alphabet et treizième des consonnes, ayant la même valeur que *k*: *Rutilus na méthode sur quelques apparences bizarres, ce serait imiter un sot qui railleait l'algèbre sur ses formules de q corre et racine de q, expressions risibles, si l'on veut; l'algèbre n'en est pas moins la plus exacte, la plus subtile des sciences.* (Fourier.)

Le *q*, traînant sa queue et querellant tout bas, Vient s'attacher à l'u qu'à chaque instant il choque Et sur le ton du *k* calque son ton taroque.

— Dans les mots français, *q* est toujours suivi d'un *u*, excepté à la fin des mots. Quand *q* est suivi de *u*, cette dernière lettre est dans tantôt nulle, comme dans *quatre, nombre, etc.*, tantôt conserve sa valeur propre, comme dans *quatre, équitation, etc.*, tantôt à la son de *ou*, comme dans *équation, aquarum, etc.*

— Comme signe abrégé, *Q* remplace certains mots qui commencent par cette consonne. Dans les inscriptions latines, il signifie: *Quintus, Quintina, Quintilianus*, noms propres; *qui, que, quod, qui, laquelle, que, quadratum*, carré; *quasius, acquis; quæstor, questeur; quantum*, autant que; *quinquagesimæ, quinquagèsimæ, QM*, signifie *quomodo*, Comment; *QAM, quemadmodum*, De même que; *Q. B. F., qui bene felicitur*, Qui a vécu heureusement; *Q. DES., quæstor designatus*, Questeur désigné; *Q. E., qui est*, Qui est; *Q. V., quæquo verum*, De quelquel côté que ce soit, De tous côtés; *QR., quare*, C'est pour-

quoi; *Q. R., quæstor republicæ*, Questeur de la république; *Q. S., quæ supra*, Les choses ci-dessus; *QS., quasi*, Comme, de la même manière que; *QVIR., quiritalia*, Fêtes qui se célébraient à Rome en l'honneur de Romulus; *QT. C., Quintus Cælius*, nom propre; *Q. TP., quo tempore*, Dans le temps que.

En mathématiques, *Q. E. D.* signifie *quod erat demonstrandum*, Ce qu'il fallait démontrer; *Q. E. F., quod erat faciendum*, Ce qu'il fallait faire.

— *Q* dans les ordonnances des médecins signifie Quantité. *Q. z.*, Quantité suffisante.

— Dans le calendrier républicain, *q* est plus ordinairement *qua* marque le *quartidi*; *q* et mieux *qui* marque *quintidi*.

— Comme signe monétaire, *q* indique les monnaies frappées à Perpignan.

— Comme lettre numérale, *q* indique le dix-septième objet d'une série, la dix-septième place. Dans les lettres numérales du moyen âge, il valait 500; surmonté d'une ligne horizontale, 500,000. Cependant, selon Ugolini, il aurait la même valeur que le *P*, c'est-à-dire 400, suivant ce vers :

*Quod Q hic sequitur numerum abulion retinendus.*

— Encycl. L'articulation que représente la lettre *q* est exactement celle qui est propre à la lettre *k* et que prend aussi le *e* quand il est dur. Cette articulation peut être dite à la fois linguale et gutturale, ainsi que le remarque M. Valser, puisque la langue est en jeu dans sa prononciation et que l'acte de son émission se passe dans la partie la plus reculée de la

cavité buccale. Mais c'est une erreur que de la qualifier de dentale, comme l'a fait Beauzée dans l'*Encyclopédie*, car les dents ne jouent ici aucun rôle. La lettre *q*, dit Beauzée avec plus de raison, est un meuble qui serait absolument inutile dans notre alphabet, s'il était raisonné et destiné à peindre les éléments de la voix de la manière la plus simple, et ce vice est commun au *q* et au *k*. Priscien en a fait la remarque il y a longtemps. Priscien ne se déclare que contre l'inutilité de la lettre *k*, quoique au fond le *q* ne soit pas plus nécessaire. Ce grammairien apparemment était de ceux qui jugeaient le *q* nécessaire pour indiquer que la lettre se formait un diphthongue avec la voyelle suivante, au lieu qu'on employait le *e* lorsque les deux voyelles faisaient deux syllabes; aussi voyons-nous encore *qui* monosyllabe au nominatif et *qui* dissyllabe au datif.

La lettre *q* fut, suivant Tacite, une de celles qui manquèrent dans le premier alphabet des Romains. Tous les mots latins qui s'écrivaient plus tard par cette lettre s'écrivaient dans le principe par *q*. Ainsi on écrivait d'abord *antiquus, cædite*, au lieu de *antiquus, quintide*. Censorinus nous apprend même que Varron et d'autres grammairiens latins ne voulurent jamais consentir à employer cette lettre, regardant comme sans utilité de établir dans leur alphabet ce caractère que les Grecs avaient pu sans inconvénient rayer de leur. Quelques savants, cependant, malgré l'opposition qui ressort pour ces lettres de la place qu'elles occupent dans leurs alphabets respectifs, se refusent à voir dans le *q* latin la reproduction du *kaf* sémi-

tique. Pour eux, le *q* fut dans l'origine moins une lettre simple qu'un digramme formé de la réunion des caractères *e* et *u* (ce dernier employé avec la valeur de *u*). En effet, disent-ils, on écrivait d'abord *quæ, quæ, quod*, puis *quæ, quæ, quod*, ce qui fut écrit plus tard *quæ, quæ, quod*. On employait la lettre *q* pour les mots où l'*u* qui accompagne cette consonne formait diphthongue avec la voyelle suivante, tandis que l'on se servait du *e* dans les cas où les deux voyelles conservaient chacune leur valeur distincte. Les poètes ont parfois employé pour un même mot l'une ou l'autre orthographe, afin de faire une seule syllabe ou deux, selon les besoins de la mesure. Lucrèce a, par exemple, écrit *æqua* pour *æqua*, et Plaute *reliquum* pour *reliquum*. La différence dans les deux cas consistait dans la manière de prononcer l'*u* qui, précédé du *e*, terminait la syllabe et précédé du *q*, appartenait à la même syllabe que la voyelle qui suivait. Freund adopte l'opinion des grammairiens latins et, avec eux, il voit *e* et du *u*. Selon lui, la forme archaïque du *q*, c'est-à-dire *quæ, quæ, quod*, est la constante indication de l'orthographe entre *quæ, quæ, quod*, dans les inscriptions et les manuscrits les plus anciens et les meilleurs, donne à cette opinion un plus haut degré de vraisemblance. Il croit que la valeur propre du *q* s'est obscurcie de bonne heure, d'où l'emploi fréquent de *quæ, quæ, quod* et l'adjonction d'un second *u* quand on avait à exprimer le son *quæ*. C'est ainsi qu'il explique comment, dans les plus anciennes inscriptions, on trouve *pecunia* et *pecunia* pour *pecunæ* et *pecunia*, *quæ* et

Fig 8 Grand dictionnaire universel du XIXe siècle

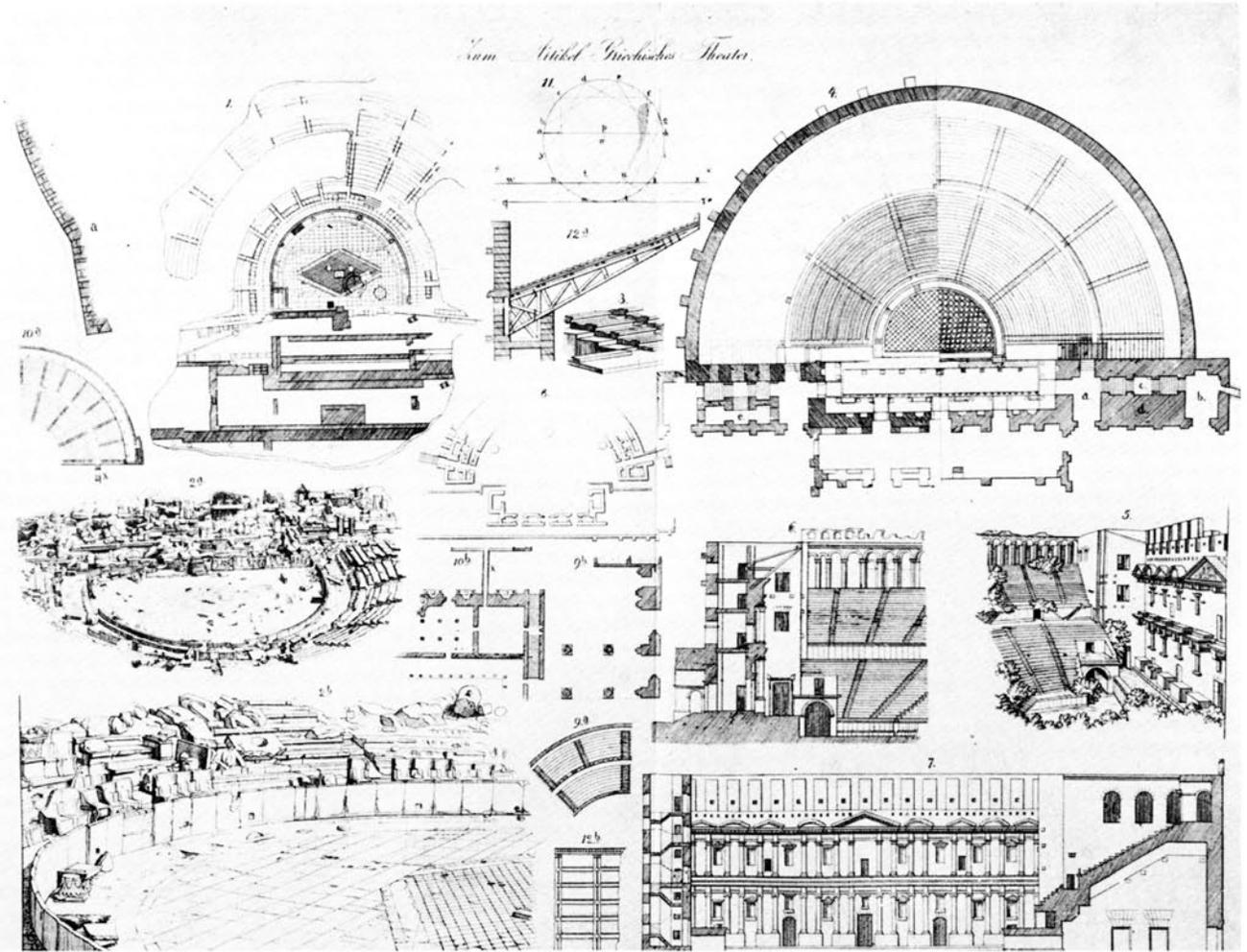


Fig. 9 *Allgemeine Encyclopädie der Wissenschaften und Künste, von genannten Schriftstellern bearbeitet*

12. Johann Samuel Ersch (1766-1828) and Johann Gottfried Gruber (1774-1851) [eds.] *Allgemeine Encyclopädie der Wissenschaften und Künste, von genannten Schriftstellern bearbeitet* 167 vols. Leipzig: J.F. Gleditsch, F.A. Brockhaus, 1818-1889. Purchase of the Library's General Book Fund

The *Allgemeine Encyclopädie* of Johann Samuel Ersch and Johann Gottfried Gruber has been called by S.H. Steinberg "a true nineteenth-century specimen of the medieval *Summa*." These two scholars of modest background had hoped to create a modern encyclopedia that would be

all-encompassing, a library of libraries. Work on the monumental project began in 1818, but by 1889, after 167 volumes had appeared, it remained unfinished, and the new publisher, F. A. Brockhaus (see section 4), decided to discontinue the project. The detailed coverage provided by individual articles is revealed in entries such as "Greece" (fig. 9), which consists of more than 3,668 pages. This encyclopedia's ultimate failure demonstrated that a single work no longer could embody all knowledge. Moreover, the prohibitive costs of these voluminous tomes prevented the intended middle-class audience from purchasing them. (Collison 1964, Lenz)

# 2 THE CATALOGUE FORM

In many respects, the catalogue form can be viewed in contrast to the *summa*. The *summa* or the meta-encyclopedia envisioned by thinkers like Hegel (cat. 4) values a system of organization over and above the particular contents of an encyclopedia. The catalogue form tends to emphasize the subject matter over any particular system; it is, in fact, the subject that determines the order, rather than the order that determines the subject. Where the author of the meta-encyclopedic *summa* strives for totality, completion, and synthesis, the compiler of a catalogue seeks diversity, plenitude, and particularity.

This is not to say that a catalogue shares none of the qualities of the *summa*, for a work such as Pliny's *Historia naturalis* (cat. 13) is truly a monument to the breadth of knowledge in first-century Roman culture. Pliny did not merely enumerate facts. He envisioned a didactic tool that could save Rome from its decadent state. Judging the literature of his time as indulgences in fancy and imagination, Pliny saw his encyclopedia as a repository of indispensable knowledge.

Similarly, Isidore of Seville and Giovanni Boccaccio penned their catalogue-encyclopedias at critical moments in history. Isidore became Archbishop of Seville during Visigothic Spain's conversion from paganism to Christianity. His *Etymologiae* (cat. 14) combined an abridged library of ancient learning with the hermeneutical tools necessary for the intellectual Christian envisioned by Augustine (cat. 1). Boccaccio's *De genealogia deorum gentilium* (The Genealogy of the Pagan Gods) (cat. 15) also presented historical knowledge to a contemporary audience in a period of transition from medieval to Renaissance humanist culture. By piecing together fragments of information about the pagan gods, the *Genealogia* served as an inventory of ancient mythology.

The catalogues of Pliny, Isidore, and Boccaccio share the ambitious scope of most *summas* in their comprehensiveness and their didactic impulse to preserve a vast body of knowledge. These catalogues differ fundamentally from the *summa* in organization. Pliny devoted himself to recording the properties of things—how each is identifiable, how each is unique. He provided not a comprehensive treatise on knowledge, but a descriptive list of facts. Isidore organized each subject according to its inherent characteristics. He compiled his dictionary in Book X alphabetically, grouped countries by geographical divisions, outlined the heavens hierarchically, and so forth. Isidore's use of etymology focused on individual words and their meanings. Similarly, Boccaccio accentuated the particular by arranging individual legends from pagan mythology within a genealogical scheme. (Fontaine, Gandillac, Grimal, Howe 1985a, Howe 1985b)



13. Pliny the Elder

*Historiae naturalis libri xxxvii*

Edited by Alessandro Benedetti. [Venice: Joannes Rubeus Verzellensis and Bernardinus Verzellensis, 1507]  
From the Library of Paul Shorey. Gift of his wife

Pliny's *Historia naturalis* (Natural History), completed in 77 A.D., was a standard text in every medieval and Renaissance library. One might better translate *historia* the way Pliny understood it, as "survey" or "research," for his work is a survey of nature, or rather, of facts known about nature. He divided the vast work into thirty-seven books with topics ranging from "Cosmography" to "Metallurgy," claiming in the preface to have gathered twenty thousand "facts" from one hundred authors.

Like most encyclopedias, Pliny's compilation was derivative, but since he did not synthesize facts, each bit of information retained its distinctiveness. Pliny's emphasis on particular facts rather than interpretation provides the modern reader valuable information on ancient practices and customs. The section on fine arts, for instance, explains how artists obtained their pigments and how the sculptor Phidias executed his design for the Parthenon. (Collison 1964, Grimal, Howe 1985a, Howe 1985b)

14. Isidore, Bishop of Seville (d. 636)

*Etymologiae; De summo bono*

[Venice, Peter Löslein, 1483.]

Berlin Collection

Isidore divided his *Etymologiae* (Etymologies) into twenty books, beginning with the liberal arts (the *quadrivium* and the *trivium*) and ending with ordinary subjects such as tools and furniture. It is surprising that Isidore, archbishop of the newly converted Visigoths of Spain, should place the secular liberal arts before the teachings of the Christian church. But Isidore, like Augustine (cat. 1) before him,

believed that the liberal arts could provide methods for Biblical exegesis and for collecting and interpreting information. He employed four fundamental categories of interpretation derived from ancient rhetoric: difference, analogy, glosses, and etymology. Etymology was the most important of these; for Isidore, as for many ancient scholars and grammarians, understanding of the original meaning of a word yielded direct knowledge of nature. Words were more than arbitrary labels; they embodied the essence of the thing itself. It was not the relationship between words that was significant but the words themselves. (Fontaine, Gandillac, Howe 1985a, Saxl)

15. Giovanni Boccaccio (1313-1375)

*De genealogia deorum gentilium*

[Florence ?, c. 1400]. Gift of Frank Wakeley Gunsaulus

Although modern readers know Giovanni Boccaccio best for his *Decameron*, the influence of his *De genealogia deorum gentilium* (The Genealogy of the Pagan Gods) is demonstrated its translation into every major European tongue. It remained a standard reference work for nearly four hundred years. In this work, Boccaccio sought to assemble and explain disparate myths and legends of antiquity. While working on the *Genealogia* Boccaccio met Petrarch, who influenced him decisively. Petrarch owned and cherished a Greek manuscript of Homer which he engaged the Paduan scholar Leonzio Pilato to translate. Pilato directed Boccaccio to sources for the *Genealogia*, enabling him to include original Greek descriptions of the gods and to be among the first humanists to defend the use of ancient languages in their original form.

Like the catalogues of Pliny (cat. 13) and Isidore (cat. 14), Boccaccio's book was an effort to salvage and transmit knowledge. He organized his material in a way that preserved the particular, amassing facts in hope of reconstructing the past.

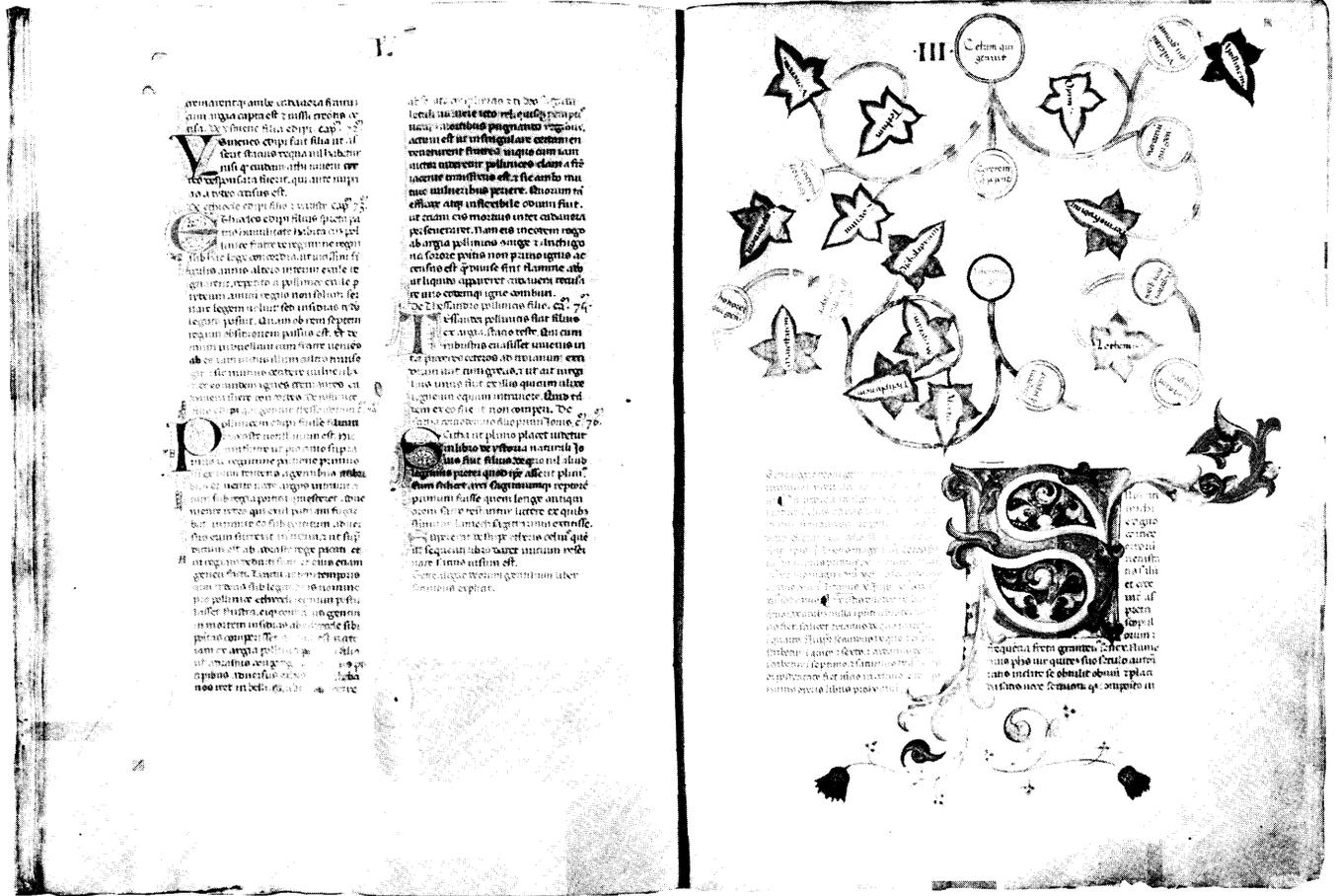


Fig. 11 *De genealogia deorum gentium*

This vellum manuscript of the *Genealogia* dates from approximately 1400 and was copied for Coluccio Salutati,

a Florentine humanist. The execution of the genealogical trees (fig. 11) is attributed to Don Simone of Siena. (Wilkins)

3 THE  
ENCYCLOPEDIA  
DICTIONARY

The distinction most frequently drawn between dictionaries and encyclopedias is that the subject of a dictionary is *words*, that of encyclopedias *things*. Yet experience shows that the subject matter in encyclopedias and dictionaries often overlaps. In fact, most modern encyclopedias are encyclopedic dictionaries, a hybrid genre that arranges contents alphabetically while treating subjects that reach beyond the definitions of a dictionary.

Although alphabetic order is associated with encyclopedias, this arrangement did not become standard until the nineteenth century. Earlier encyclopedias usually were arranged thematically or by subject. The order of subjects reflected a particular view of the world. Medieval encyclopedias, for example, placed divine matters before secular ones. Dictionaries, on the other hand, traditionally have been shaped by the alphabet, since early glossaries employed alphabetic arrangement to record lists of words in an order both convenient and neutral.

The seventeenth century *Dictionnaire universel* (cat. 18) by Antoine Furetière is one example of an encyclopedic dictionary. Furetière arranged the contents alphabetically, but he noted in the preface that “it is not simply words that are taught, but an infinite number of things, . . . principles, rules, and the foundation of arts and sciences.” Beyond the pure linguistic use of a word, the reader learns its context. This points toward an important distinction between encyclopedias and dictionaries: dictionaries are analytic, defining words in a particular sense; encyclopedias are more synthetic, presenting words or concepts in a general sense or as they are experienced.

Experience was also central to John Harris’s *Lexicon Technicum* (cat. 19) and Ephraim Chambers’s *Cyclopaedia* (cat. 20). With their emphasis on sciences and technology, these two works marked a shift from the linguistic world of the word-book to the empirical world of the subject-book. Harris wrote in his preface: “That which I have aimed at is to make it a Dictionary not only of bare *Words* but *Things*.” Both Harris and Chambers sought to complement the reader’s capacity for abstract reason by appealing to the senses; they not only described objects and ideas, they demonstrated them.

The popularity of the encyclopedic dictionary steadily increased throughout the eighteenth century, due largely to its accommodating form. Unlike the traditional *summa* which addressed a homogeneous and elite audience with a hierarchical arrangement of knowledge (see section 1), the encyclopedic dictionary form with the more neutral alphabetical arrangement reached a diverse audience. It was the ideal form for Johann Theodor Jablonski’s *Allgemeine Lexicon* (cat. 21), written for the growing educated classes in eighteenth-century Germany. To accommodate this new readership, Jablonski broke with the traditional Latinate structure of the *quadrivium* and used alphabetic order to arrange German terms and names.

The alphabetic order in the encyclopedic dictionary can make subversive remarks seem neutral as seen in Pierre Bayle’s 1697 *Dictionnaire historique et critique* (cat. 23). The encyclopedic dictionary form conveys ideology not by its overall arrangement as do thematically arranged works, but through the individual entries that compose the text. Finally, the encyclopedic dictionary introduces an open-ended structure that provides for infinite expansion and flexibility. The body of knowledge no longer remains within fixed boundaries but is capable of change and subject to scrutiny. (Collison 1964, Eco 1984, Haiman, McArthur, Rétat, Rey 1989, Steinberg)

16. *Suidas (Lexicon graecum)*

Milan: Giovanni Bissoli and Benedetto Dolcibelli,  
for Demetrius Chalcondyls, 15 November 1499  
Gift of Frank Wakeley Gunsaulus

For many years *Suidas* was thought to be the name of the author of this tenth-century Byzantine encyclopedia. But the word actually derives from *suda*, meaning fortress or bulwark. The architectural metaphor is important, for the *Suidas* is a monumental work containing over 30,000 lemmata, or headings, gleaned from ancient sources on biography, history, and the natural sciences.

Although not used consistently throughout the work, the alphabet provided a convenient way to organize a wide range of material. The Greeks had arranged tax lists and library catalogues alphabetically as early as the third century B.C. Ironically, by the time the Byzantine scholar Demetrius Chalcondyles published the *Suidas* in 1499, alphabetic arrangement was still novel in Western Europe, and it was only later in the sixteenth century that its use became widespread. (Eisenstein, Hanawalt, Witty)

17. Domenico Nani Mirabelli (fl. 1500)

*Polyanthea*

Savona: Francesco Silva, 1503

From the Library of John Matthews Manly

Domenico Nani Mirabelli's *Polyanthea*, shown here in the first edition of 1503, became a very popular work. It was reprinted as late as 1572, and in 1607 Joseph Lang reproduced large portions of it in his *Polyanthea nova*. The word *Polyanthea* means "many flowers," referring in a metaphorical sense to the diverse flowers in the garden of knowledge. Mirabelli arranged the contents alphabetically under subjects such as *humilitas* and *luxurias* (fig. 12). These headings were rhetorical commonplaces or topics for which he culled facts and quotations from ancient

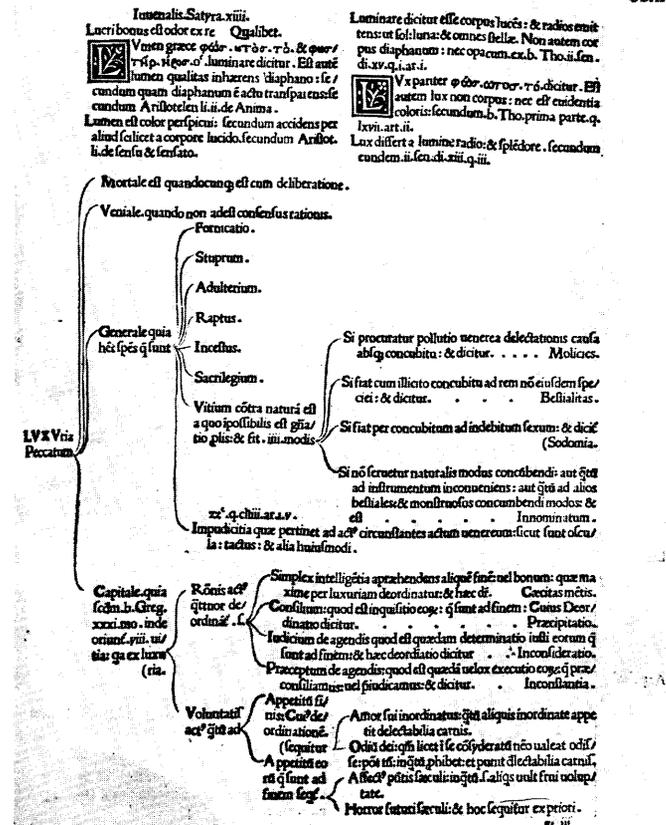


Fig. 12 *Polyanthea*

Greek and Roman authorities, the Bible, and contemporary writers. Filled with illustrative examples, these rubrics provided the orator or student with sources to prepare a rhetorical composition or to build a garden of knowledge based on the liberal arts.

18. Antoine Furetière (1619-1688)

*Dictionaire universel. . .*

3 vols. The Hague and Rotterdam: Arnout & Reinier Leers, 1690. Purchase of the Library's General Book Fund

Antoine Furetière did not live to see the publication of his *Dictionaire universel* in 1690. Furetière had been a member of the Académie Française, the official authority

on language and culture, which had expelled him on the grounds that specimen sheets for his dictionary plagiarized the Académie's own dictionary. But a comparison reveals that the two works were fundamentally different.

The *Dictionnaire de l'Académie Française* was concerned with correct usage, good taste, and preservation of the French language at its best. Latinisms, foreign words, technical terms, and colloquial or vulgar expressions were not allowed to violate its purity. In this work language was an end in itself, an attitude reinforced by the Académie's decision to arrange the words according to their morphological and etymological roots.

Furetière's dictionary, on the other hand, had a strong utilitarian bent; it was arranged alphabetically, making it more accessible. Besides including multiple definitions of a single word, Furetière included expressions considered too base by the Académie, such as terminology from the arts and technology. In contrast to the Académie's elite and self-reflexive view of language, Furetière believed that language was a part of social interaction. It reflected the diversity of its speakers and responded to changes in society and culture. (Rétat, Rey 1989, Ross)

19. John Harris (1667?-1719)

*Lexicon Technicum, or,*

*An Universal English Dictionary of Arts and Sciences*

2nd edition. 2 vols. London: D. Brown [etc.]

1708-1710. Purchase of the Library's

General Book Fund

The *Lexicon Technicum* of John Harris is probably the first encyclopedic dictionary to emphasize science. The widespread support it received suggests the need for such an approach. The first edition of 1704 had nine hundred subscribers including Isaac Newton; by 1710, when the supplement appeared, the number of subscribers had grown to twelve thousand.

In his preface Harris stressed the practical nature of his book. The earlier form of the dictionary, he complained, was "too much filled with the School Terms to be usefully instructive; and is as defective in the Modern Improvement of Mathematical and Physical Learning." His *Lexicon Technicum* included not only "Technical Words, or the Terms of Art [but the] Arts themselves." Harris wanted to do more than enumerate a list of words—he wanted to demonstrate their function. To this end, Harris employed numerous illustrations, including foldouts featuring recent inventions such as John Marshall's microscope (fig. 13). (Bradshaw)

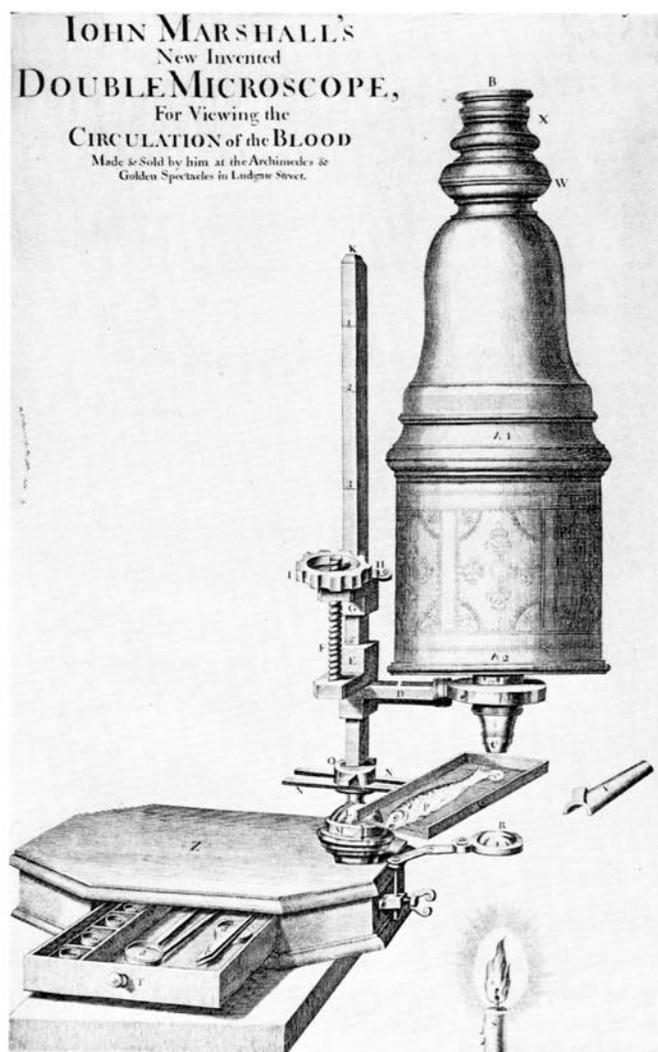


Fig. 13. *Lexicon Technicum*, . . .

20. Ephraim Chambers (ca. 1680-1740)  
*Cyclopaedia, or, An Universal Dictionary of  
 Arts and Sciences, . . . the Whole Intended as a Course of  
 Ancient and Modern Learning*  
 2 vols. London: J. and J. Knapton [and others], 1728  
 Gift of Cyril S. Smith

The *Cyclopaedia* of Ephraim Chambers first appeared in 1728 and was so successful that eight editions were issued over the next twenty years. Its influence spread even across the English Channel, inspiring the celebrated *Encyclopédie* (cat. 43) of Diderot and d’Alembert some thirty years later.

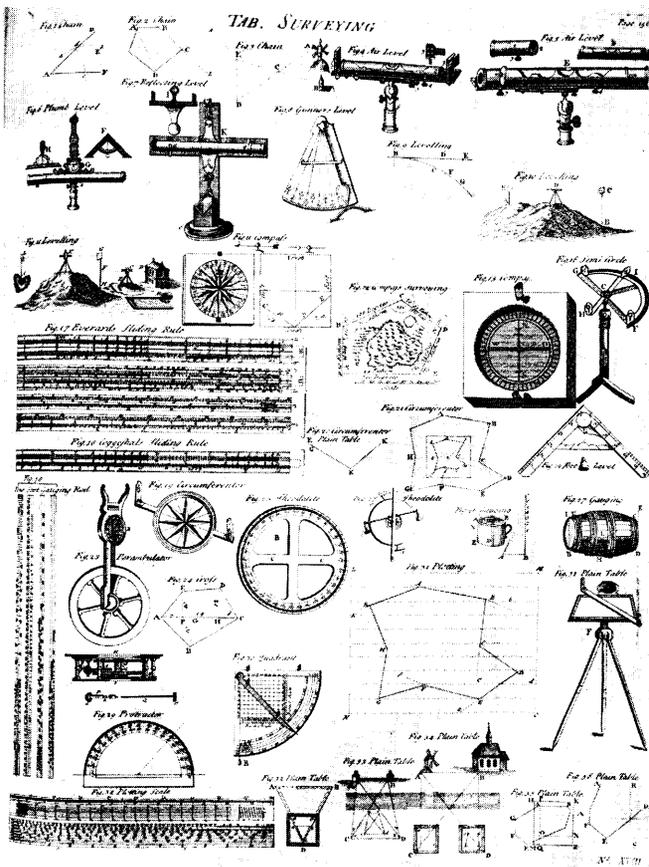


Fig. 14 *Cyclopaedia, or, An Universal Dictionary of Arts and Sciences, . . . the Whole Intended as a Course of Ancient and Modern Learning*

The popularity of the *Cyclopaedia*, like Harris’s *Lexicon* (cat. 19), was due to its inclusion of technological advances and its convenient dictionary format. Chambers took great pains to avoid the “confused Heap of incongruous Parts” inherent in the arbitrary system of alphabetization. Using cross-references even more extensively than Harris, Chambers attempted to construct what he called “a continued discourse.” “By a course of References,” he wrote, “from General to Particulars, from Premises to Conclusions, from Cause to Effect, . . . a communication is opened between several parts of the work.” The reader of a section like “Surveying” (fig. 14), for instance, found references to related articles on “Measuring,” “Map,” “Geometry,” and “Compass.” As in Harris’s *Lexicon*, illustrations helped to communicate the significance of mechanical arts and recent inventions. (Bradshaw, Shorr)

21. Johann Theodor Jablonski (1654-1731)  
*Allgemeines Lexicon der Künste und Wissenschaften. . . .*  
 2nd edition. Königsberg and Leipzig: Johann Heinrich  
 Hartung, 1748. Purchase of the Library’s  
 General Book Fund

The promotion of German language and culture was important to Johann Theodor Jablonski, the first secretary of the Prussian Academy founded in 1700. His encyclopedic dictionary, dedicated to Prince Friedrich Wilhelm of Prussia (1700-1771), had the effect of legitimizing use of the German language at a time when Latin and French were beginning to lose their ascendancy in Prussia. He took pains to assure that most headings were in German and translated French and Latin terms in the index. The *Allgemeines Lexicon* enjoyed immediate success and was revised and expanded in 1748 and 1767. (Collison 1964, Kossmann)



Fig. 15 *Allgemeines Lexicon der Künste und Wissenschaften*. . . .

22. Noah Webster (1758-1843)

*The American Dictionary of the English Language*. . . .

2 vols. New York: S. Converse, 1828. Purchase of the Library's General Book Fund

Noah Webster was an educator and journalist keenly interested in the English language. Before publishing his monumental *American Dictionary of the English Language* in 1828, he wrote several books on grammar and spelling as well as *A Compendious Dictionary of the English Language* in 1806.

Webster's *American Dictionary of the English Language* is a kind of encyclopedic dictionary because of its comprehensive definitions. It arose from the notion that language connects intimately with geo-political realities; as a society distinct from England, Americans needed their own

dictionary embracing words and expressions particular to their own experience. Without question Webster was reacting against the unchallenged British authority of Samuel Johnson's *Dictionary of the English Language* (1755). For many of Webster's American contemporaries, Johnson's was still the best English dictionary, but Webster considered Johnson's view of language too limited. Johnson's over-emphasis on arcane and literary words had hindered him from acknowledging new developments in language. Webster designed his dictionary to include Americanisms as well as "new words which recent discoveries in the physical sciences have introduced into use."

Ironically, despite Webster's efforts to validate experienced language—language actually in use rather than that of the literary past—he cited Johnson's definition for "dictionary" in his own work. (Landau, McArthur)

23. Pierre Bayle (1647-1706)

*Dictionnaire historique et critique*

2 vols. Rotterdam: Reinier Leers, 1697. From the Library of John Matthews Manly

The rationalist philosopher Pierre Bayle was a French Protestant who spent most of his professional career in exile from France. His *Dictionnaire historique et critique* is a product of his own intimate experience with the religious and political turmoils of the seventeenth century. The format of the encyclopedic dictionary aided Bayle's evenhanded treatment of these controversies since its open-ended structure allowed him to present different points of view simultaneously. He juxtaposed opposing opinions typographically with the primary text set at the top, the secondary text at the bottom, and two sets of subtexts in the margins (fig. 16). Bayle aimed especially to counter the Catholic bias and uncritical attitude of Louis Moréri's *Le grand dictionnaire historique* (1674).

Bayle was working within the skeptical tradition,

PYRRHON, Philosophe Grec, nâif d'Elide au Peloponnefe, fut difciple d'Anaxarque, & l'accompagna jufques aux Indes. Ce fut fans doute à la fuite d'Alexandre le Grand, d'où l'on peut conoitre en quel tems il a fleuri. Il avoit exercé le métier de Peintre, avant que de s'attacher à l'étude de la Philofophie. Ses fentimens ne différoient guere des (A) opinions d'Arcefilas; car il s'en faloit bien peu qu'auffi bien que lui il n'enseignât l'incompréhensibilité de toutes chofes. Il trouvoit par tout & des raifons d'affirmer, & des raifons de nier: & c'est pour cela qu'il renoit fon contentement apres avoir bien examiné le pour & le contre, & qu'il redifoit tous les arrêts à un *non liquet*, foit plus amplement enquis. Il cherchoit donc toute fa vie la vertu, mais il fe menageoit toujours des reflources pour ne tomber pas d'accord qu'il l'eût trouvée. Quoi qu'il ne foit pas l'inventeur de cette methode de philofopher, elle ne lui fit pas porter fon nom: l'art de difputer fur toutes chofes, fans prendre jamais d'autre party que de fufpendre fon jugement, s'appelle le *Pyrrhonifme*: c'est fon titre le plus commun. C'est avec raifon qu'on le detelle (B) dans les Ecoles de Theo-

(a) *Secundum* *quod* *non* *apud* *nos* *est* *ut* *quod* *autem* *monitum* *volumus* *(amice* *lector)* *hoc* *opusculum* *primum* *nos* *Gallie* *fecisse* *in* *publium* *proditurum* *accertisse* *ad* *eorum* *judicium* *quod* *judicibus* *et* *parentibus* *referre* *debet* *de* *conformatione* *naturali* *aut* *vitiata* *puerorum* *virginum* *nuptiarum* *aut* *inuptiarum* *quarum* *he* *maximum* *visu* *aproxi* *intelligenti* *(p.e. ille* *vero* *multum* *à* *mari* *u* *aut* *saltem* *spem* *in* *ambulatoribus* *et* *fatus* *matam* *posse* *conquerantur* *Sed* *cum* *primas* *delineationes* *quibusdam* *expofuiffemus* *coque* *firmus* *que* *horum* *alias* *ad* *laftitiam* *alios* *ad* *vaniloquum* *et* *procuratorem* *partus* *quam* *ad* *fructum* *aliquem* *ex* *eo* *filii* *et* *republica* *ut* *item* *colligendam* *expetere* *in* *ufficiis* *noftri* *rationem* *mutavimus* *atque* *in* *sermone* *Latium* *convertimus* *philatrick* *solis* *et* *interati* *hominum* *et* *de* *veris* *(b) Il* *mot* *bus* *de* *veris* *hæretis* *excepit* *impulsi* (b). Næce que fon livre comprend deux parties. Dans la 1. il examine les marques de la virginité; & il fouvient dans la 2. qu'il y a deux (c) os qui fe leparent lors que les femmes accouchent. Il exhorte les Medecins & les Chirurgens à fe fouvenir de fon hypothefe; foit afin de faciliter la difponcton de ces deux os; foit afin de les rejoindre apres que l'enfant eût né. (d) *Propterea* *mulieres* *in* *utero* *habentes* *et* *pueros* *adhuc* *in* *eo* *degentes* *ac* *flabulantes* *non* *fe* *negligendos* *effe* *hortamur* *fed* *omni* *auxilio* *et* *arte* *juvandos* *ut* *non* *minus* *saltem* *diligentes* *fe* *prebuisse* *videantur* *Medici* *et* *Chirurgi* *in* *partibus* *dilatandis* *per* *quas* *exiit* *fetus* *de* *utero* *matris* *quam* *quom* *editas* *est* *in* *reftem* *conftingentes* *folliciti* *sunt* *Quod* *fi* *apte* *et* *convenienter* *fi* *Eleutina* *medicamenta* *emollientia* *qua* *vobis* *forma* *parata* *poterunt* *symphyfis* *prædicorum* *opium* *pubis* *et* *alium* *adhibere* *hinc* *fuertit* *ut* *natura* *dacer* *atque* *ipfames* *quantum* *non* *potest* *prestat* *Quæ* *offa* *hinc* *in* *symphyfis* *de* *terre* *ad* *vehementer* *conftituta* *sunt* *reliquo* *vita* *tempore* *ut* *crurus* *alibi* *puta* *in* *medio* *fu* *frangerentur* *quam* *in* *caufa* *quodam* *procuratibus* *ad* *invicem* *dilatarentur* *qua* *tamen* *tempore* *partus* *diffrabuntur* *(c) Les* *pubis* *et* *l'os* *dit.* *(d) Ne* *diffèrent* *guere* *des* *opinions* *d'Arcefilas* *Si* *je* *l'avois* *ponctuellement* *Aicagne* *d'Abdère* *(b) Id.* *il* *je* *dirois* *qu'il* *n'y* *avoit* *nulle* *différence* *entre* *ces* *deux* *Philofophes* *(c) Dicitur* *in* *Arcefilas* *quod* *non* *est* *ut* *quod* *autem* *monitum* *volumus* *(amice* *lector)* *hoc* *opusculum* *primum* *nos* *Gallie* *fecisse* *in* *publium* *proditurum* *accertisse* *ad* *eorum* *judicium* *quod* *judicibus* *et* *parentibus* *referre* *debet* *de* *conformatione* *naturali* *aut* *vitiata* *puerorum* *virginum* *nuptiarum* *aut* *inuptiarum* *quarum* *he* *maximum* *visu* *aproxi* *intelligenti* *(p.e. ille* *vero* *multum* *à* *mari* *u* *aut* *saltem* *spem* *in* *ambulatoribus* *et* *fatus* *matam* *posse* *conquerantur* *Sed* *cum* *primas* *delineationes* *quibusdam* *expofuiffemus* *coque* *firmus* *que* *horum* *alias* *ad* *laftitiam* *alios* *ad* *vaniloquum* *et* *procuratorem* *partus* *quam* *ad* *fructum* *aliquem* *ex* *eo* *filii* *et* *republica* *ut* *item* *colligendam* *expetere* *in* *ufficiis* *noftri* *rationem* *mutavimus* *atque* *in* *sermone* *Latium* *convertimus* *philatrick* *solis* *et* *interati* *hominum* *et* *de* *veris* *(b) Il* *mot* *bus* *de* *veris* *hæretis* *excepit* *impulsi* (b). 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(d) *Propterea* *mulieres* *in* *utero* *habentes* *et* *pueros* *adhuc* *in* *eo* *degentes* *ac* *flabulantes* *non* *fe* *negligendos* *effe* *hortamur* *fed* *omni* *auxilio* *et* *arte* *juvandos* *ut* *non* *minus* *saltem* *diligentes* *fe* *prebuisse* *videantur* *Medici* *et* *Chirurgi* *in* *partibus* *dilatandis* *per* *quas* *exiit* *fetus* *de* *utero* *matris* *quam* *quom* *editas* *est* *in* *reftem* *conftingentes* *folliciti* *sunt* *Quod* *fi* *apte* *et* *convenienter* *fi* *Eleutina* *medicamenta* *emollientia* *qua* *vobis* *forma* *parata* *poterunt* *symphyfis* *prædicorum* *opium* *pubis* *et* *alium* *adhibere* *hinc* *fuertit* *ut* *natura* *dacer* *atque* *ipfames* *quantum* *non* *potest* *prestat* *Quæ* *offa* *hinc* *in* *symphyfis* *de* *terre* *ad* *vehementer* *conftituta* *sunt* *reliquo* *vita* *tempore* *ut* *crurus* *alibi* *puta* *in* *medio* *fu* *frangerentur* *quam* *in* *caufa* *quodam* *procuratibus* *ad* *invicem* *dilatarentur* *qua* *tamen* *tempore* *partus* *diffrabuntur*

c'étoit le dogme d'Arcefilas. Neanmoins j'ai mieux aimé laiffer entre eux quelque différence, parce que l'esprit des Pyrrhoniens ne fupôse pas formellement l'incompréhensibilité. On (f) les a nommez Sceptiques, Zetétiques, Ephetiques, Aporetiques, c'est-à-dire examinateurs, inquisiteurs, fufpendans, douteans. Tout cela montre qu'ils fupôsoient qu'il étoit poffible de trouver la vérité, & qu'ils ne decidoient pas qu'elle étoit incompréhensible. Vous trouverez dans Aufugelle qu'ils condamnoient ceux qui affirent qu'elle l'eft. & Aufugelle vuida, felon cet Auteur, la différence des Pyrrhoniens & des (g) Academiciens: en tout le relie ils fe reffembloient parfaitement; & ils fe donnoient les uns & les autres les noms (h) que j'ai raifonnés de la porter. Car (i) *hæc* *autem* *committit* *tam* *Pyrrhonius* *quam* *Academici* *differt* *tamen* *int* *esse* *car* *Arcefilas* *et* *propter* *alia* *quædam* *et* *maxime* *propterea* *filia* *expofuit* *tant* *quod* *Academici* *quidem* *ipsum* *illud* *nihil* *posse* *comprehendi* *quæsi* *comprehendunt* *hinc* *Autus* *et* *nihil* *posse* *discerni* *quæsi* *discernunt* *Pyrrhonius* *id* *est* *quod* *nihil* *nullo* *paffo* *videri* *verum* *dicitur* *quod* *cap. 5. nihil* *esse* *verum* *videtur* *(k) Sextus* *Empiricus* *(k)* *trouve* *une* *autre* *différence* *: Arcefilas* *pretendit* *que* *la* *fufpencton* *fu* *bonne* *naturellement* *et* *que* *l'affirmation* *fu* *mauvaise* *naturellement* *mais* *felon* *Pyrrhon* *elles* *ne* *l'étoient* *qu'en* *apparence* *et* *qu'elles* *ne* *font* *qu'en* *apparence* *secundum* *naturam* *sed* *secundum* *id* *quod* *apparet* *Dans* *le* *fond* *l'un* *n'étoit* *pas* *pour* *le* *doute* *avec* *plus* *d'ardeur* *que* *l'autre* *et* *rien* *n'étoit* *plus* *facile* *que* *de* *les* *mettre* *d'accord* *Il* *ne* *falloit* *que* *leur* *demandar* *qu'ils* *s'expliquaffent* *nettement* *et* *finement* *(l)* *(B) Qu'on* *le* *detelle* *dans* *les* *Ecoles* *de* *Theologie* *ou* *théologie* *C'est* *par* *raport* *à* *cette* *divine* *science* *que* *le* *Pyrrhonifme* *eft* *dangereux* *car* *en* *ce* *cas* *on* *ne* *voit* *pas* *qu'il* *le* *foit* *guere* *ni* *par* *raport* *à* *la* *Phyfique* *ni* *par* *raport* *à* *l'Etat* *Il* *importe* *peu* *qu'on* *dife* *que* *l'efprit* *de* *l'homme* *eft* *trop* *borné* *pour* *rien* *decouvrir* *dans* *les* *vertés* *naturelles* *dans* *les* *caufes* *qui* *produifent* *la* *chaleur* *le* *froid* *le* *flux* *de* *la* *mer* *et* *c.* *Il* *nous* *doit* *fuftre* *qu'on* *s'exerce* *à* *chercher* *des* *hypothefes* *probables* *et* *à* *recueillir* *des* *expériences* *et* *je* *fus* *fort* *affuré* *qu'il* *y* *a* *tres-peu* *de* *bons* *Phyficiens* *dans* *notre* *fiècle* *qui* *ne* *le* *foient* *convaincus* *que* *la* *nature* *eft* *un* *abime* *impenctable* *et* *que* *les* *reffons* *ne* *font* *connus* *qu'à* *celui* *qui* *les* *a* *faits* *et* *qui* *les* *dirige* *Ainsi* *tous* *ces* *Philofophes* *font* *à* *cet* *égard* *Academiciens* *et* *Pyrrhoniens* *La* *vie* *civile* *n'a* *rien* *à* *craindre* *de* *cet* *efprit-là* *car* *les* *Sceptiques*

Fig. 16 Dictionnaire historique et critique

carefully balancing and contrasting statements to create a dialogue. His text presents the process of critical examination, but it offers no final resolution. His method emulated that of the ancient skeptic Pyrrho who, in Bayle's words, "found reasons for affirming and reasons for denying. That is why, after having carefully examined the pros and cons, he withheld his assent, and why he limited his judgements

to *non liquet*, 'let the matter be examined further.'

For Bayle the encyclopedic dictionary became a vehicle for presenting critical discourse in a manner that forced the reader to re-examine accepted ideas. The *philosophes* of the eighteenth century did not forget this model when they compiled their *Encyclopédie* (cat. 43). (Burrell, Gossman, Kenshur, Réat)

# 4 THE CONVERSATION AS DIDACTIC METHOD

The conversational style of exposition has played a historically important role in the popularization of knowledge. By the seventeenth century the world of learning had become less confined to monastic or humanist libraries and more a part of everyday discourse and interaction. One manifestation of this change is that encyclopedias began to appear in the vernacular rather than in Latin, adopting a vocabulary and tone that reached a larger audience.

Compilers of encyclopedias recognized the power of conversational style as a didactic tool, especially when cast in dialogue form. Employed in philosophical treatises since ancient times, the dialogue enabled an author to present more than one side of a proposition and convey a reasoning process as the argument developed through a series of questions and answers.

Michael Pexenfelder's *Apparatus eruditionis* (The Tools of Learning) (cat. 17) exemplified the use of dialogue to soften a lecturing tone. The reader felt drawn into a conversation, seemingly discovering information in its natural rhythms. This technique can disguise the writer's obvious control while encouraging the reader's own initiative to engage with the text.

During the Enlightenment, a conversational style in writing became increasingly popular as reaction built against pedantic tendencies in humanism. The attainment of knowledge was to be a passionate endeavor, engaging the wit and teasing the mind. Attractively introduced, even the most complex subjects became interesting and comprehensible. Thus, Bernard de Fontenelle could discuss the Copernican system in a series of dialogues he promised would "not be too dry and insipid." Voltaire could couch a controversial topic such as religion in a witty conversational tone in his *Dictionnaire philosophique, portatif* (cat. 26). This technique enhanced the readability of Voltaire's critical encyclopedia while softening, and sometimes even disguising, his scathing remarks on religious doctrine.

The art of intelligent social conversation was also a skill increasingly important for the rising middle class. The production of new encyclopedias in the nineteenth century responded to this demand, especially in Germany where the genre of the *Conversations-Lexicon* was born. Unlike the eighteenth-century *Encyclopaedia Britannica* (cat. 51), originally designed by, and for "gentlemen," Friederich Arnold Brockhaus's *Conversations-Lexicon* (cat. 28) addressed the middle classes. As S.H. Steinberg points out, *Conversation* in German meant "good manners" and "polite erudition," and Brockhaus intended his *Lexicon* "to improve general knowledge as a means to gain entry into good society." Unlike the rigorous treatment of subjects in works like the *Britannica*, the *Conversations-Lexicon* approached topics in a broad and popular manner. (France, Steinberg)

24. Michael Pexenfelder (1613-1685)  
*Apparatus eruditionis tam rerum  
 quam verborum per omnes artes et scientias*  
 Sulzbach: Heirs of Michael and Johann Friedrich  
 Endter, 1680. Purchase of the Library's  
 General Book Fund

Michael Pexenfelder was a Bavarian Jesuit pedagogue whose *Apparatus eruditionis* (The Tools of Learning) first appeared in 1670. These “tools” crowd the engraved title page (fig. 17), demonstrating the wide range of material



Fig. 17 *Apparatus eruditionis tam rerum quam verborum per omnes artes et scientias*

covered, from astronomy to music, flora and fauna, trades, and industry. Pexenfelder presented this wealth of knowledge in a series of dialogues between Desiderius and Mercurialis, a teacher and pupil. Although preconceived by the writer, these conversations invite the reader to enter the process of learning and encourage independent thought. Particularly favored among the Jesuits, masters of rhetoric, the dialogue form served as a mnemonic device for orator and student alike.

25. Georg Philipp Harsdörffer (1607-1658)  
*Frauenzimmer Gesprächspiele. . . .*  
 8 vols. Nuremberg: Wolfgang Endter, 1644-1657  
 Purchase of the Library's General Book Fund

The *Frauenzimmer Gesprächspiele* (Conversational Games for Ladies) appeared in small oblong volumes at irregular intervals between 1644 and 1657. Its author, Georg Philipp Harsdörffer, published a large number of translations and literary anthologies as well as his own poems and treatises and was a founder of the “Shepherds of the Pegnitz,” a literary society devoted to the cultivation and refinement of the German language. The *Gesprächspiele* featured a series of conversations among six people (three women and three men), capturing the light-hearted ambience of a salon.

The conversational form presented material in a polite manner, making topics such as astronomy, music, and poetry easily comprehensible and enjoyable; the convenient pocket size and numerous illustrations (fig. 18) also added to the work's appeal. Beginning with the third volume, *Frauenzimmer* disappeared from the title, presumably to avoid frightening away potential male readers. Like Harsdörffer's literary society, the *Gesprächspiele* served to develop a German bourgeois culture. (Faber du Faux)

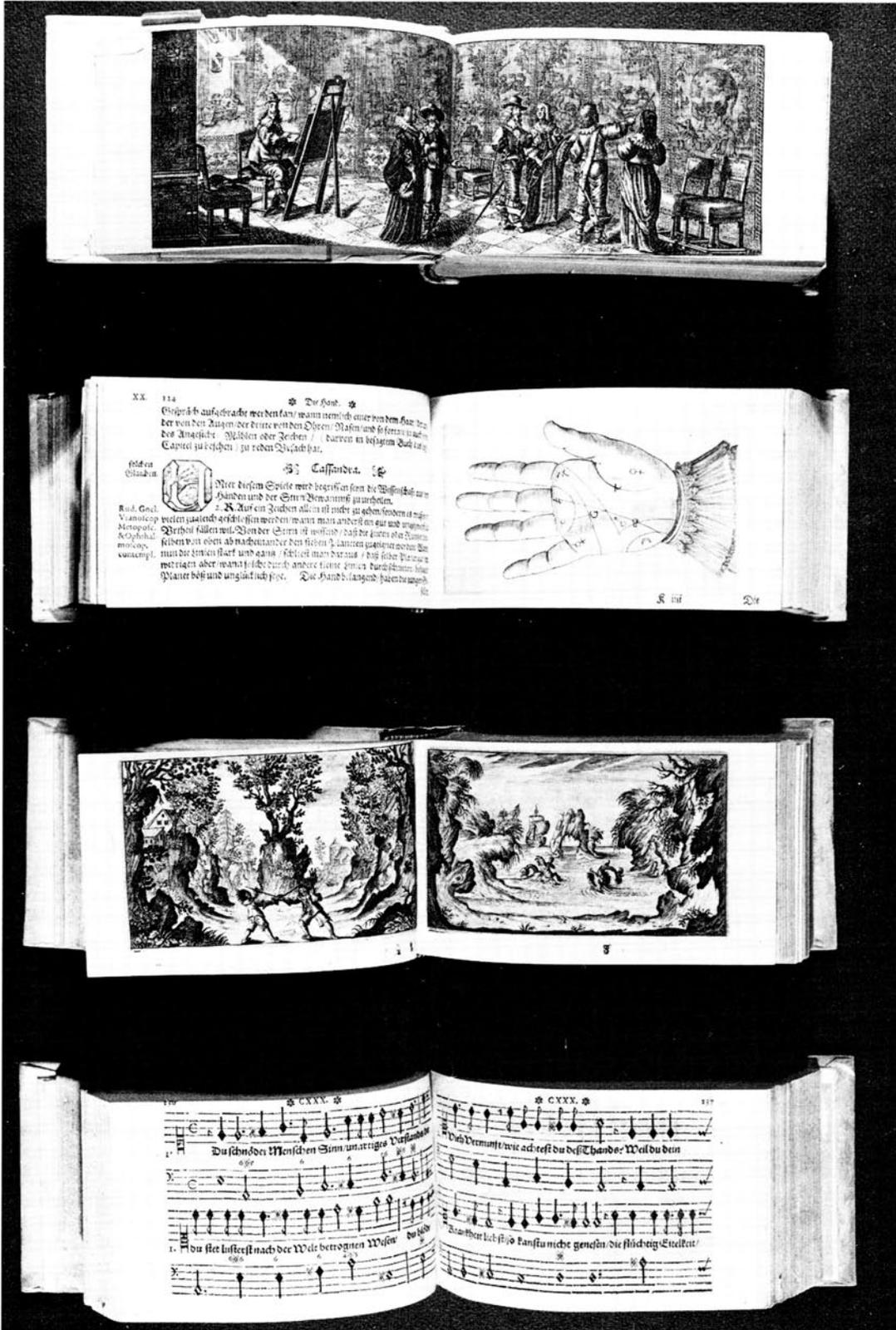


Fig. 18 Frauenzimmer Gesprächspiele. . . .

26. Voltaire (1694-1778)  
*Dictionnaire philosophique, portatif*  
London [Geneva], 1764. Purchase of the  
Library's General Book Fund

Voltaire's *Dictionnaire philosophique, portatif* reflected a culture that cherished the gift of conversation and disdained pedantry. Voltaire played to his audience's attitude by injecting a witty, conversational style into his dictionary. His brief entries engaged the reader with rhetorical questions, personal pronouns such as "we" or "I," illustrative anecdotes, and sharp repartee. These techniques gave the work the freshness and openness of a spontaneous conversation and functioned as powerful rhetorical tools for Voltaire, presenting an anti-religious doctrine in a calculated yet compelling fashion. (France, Rétat)

27. Johann Hübners  
*Reales Staats- Zeitungs- und Conversations-Lexicon. . . .*  
Leipzig: in Gleditschens Buchhandlung, 1789  
Berlin Collection

Although Hamburg schoolmaster and prolific author Johann Hübner contributed nothing more than the preface for the *Reales Staats- und Zeitungs-Lexicon* in its first edition of 1704, his name became part of the title in later editions of this popular work. The fourth edition of 1709 added a significant element to the title, calling it a *Conversations-Lexicon*, the first use of this term for an encyclopedia. From this time forward, it was to remain an important feature in German encyclopedias.

The *Conversations-Lexicon* addressed a popular, middle-class audience, rather than a scholarly one. Consequently, its headings were general and its information as concise and comprehensible as possible. This emphasis on practicality even extended to its handy octavo format. The success of

this approach is demonstrated by its numerous editions, thirty-one in all, the last appearing in 1825.

As in Jablonski's *Allgemeines Lexicon* (cat. 21), German terminology replaced Latin or French and the index translated foreign words into German.

The 1789 edition displayed here is the same edition that Johann Wolfgang von Goethe kept in his Weimar library. (Collison 1964, Lenz, Paulsen)

28. *Allgemeine deutsche Real-Encyclopädie für die gebildeten Stände. (Conversations-Lexicon)*  
6th edition. 10 vols. Leipzig: F.A. Brockhaus, 1824  
Berlin Collection

The French lexicographer and encyclopedist Pierre Larousse (cat. 11) praised the Brockhaus *Conversations-Lexicon* because it "diffused common knowledge. . . to all positions and all classes of society." Indeed, Friederich Arnold Brockhaus's success was so great that he edited six separate editions of his *Lexicon* in the short span of fourteen years. The Brockhaus name still represents one of the most popular German encyclopedias and a notable family in the publishing industry.

The success of the *Brockhaus*, like that of Hübner's *Lexicon* (cat. 27), was due to its convenient format and its focus on general knowledge. But while the *Hübner* concentrated on geography at the expense of history and biography, the *Brockhaus* included nearly all fields, although there was a greater emphasis on humanities than sciences in the early editions. Its frequent revisions gave it the up-to-date quality of an almanac, allowing it to overtake the *Hübner* in popularity.

The sixth edition shown here is the last that F. A. Brockhaus himself edited. After his death, the Brockhaus enterprise passed to his second son, Heinrich. (Hübscher, Lenz, Paulsen, Steinberg)



Fig. 19 Reales Staats- Zeitungs- und Conversations-Lexicon. . .

29. Francis Lieber (1800-1872), ed.  
*Encyclopaedia Americana. A Popular Dictionary of  
Arts, Sciences, Literature, History, Politics and  
Biography. . . on the basis of the seventh edition of  
the German Conversations-Lexicon*  
13 vols. Philadelphia: Carey, Lea &  
Carey, 1829-1833. Anonymous gift

This first edition of the *Encyclopaedia Americana*, the earliest encyclopedia published in the United States, was based on the seventh edition of the *Brockhaus* encyclopedia and edited by Francis Lieber, a German immigrant.

In his preface, Lieber wrote of the need for a new kind of encyclopedia to reflect the rapid increase in the accumulation and dissemination of knowledge. With these modern conditions in mind, the *Brockhaus Conversations-Lexicon* was “a work chiefly designed for the use of persons who would take part in the conversation or society of the well-informed circles.” Lieber updated the *Brockhaus* and added subjects relevant to American readers. Its success was immediate, and the *Encyclopaedia Americana* remains one of the most popular North American encyclopedias. (Collison 1964, Finzi)

30. *Dictionnaire de la  
conversation et de la lecture*

52 vols in 26. Paris: Belin-Mandar, 1832-1839  
Purchase of the Library's General Book Fund

The *Dictionnaire de la conversation* is a French adaptation of the *Brockhaus Conversations-Lexicon*. It was published between 1832 and 1839 by Belin-Mandar, the second generation of publishers from the Belin family, known for their editions of classical and religious texts.

The quotation cited from Montesquieu on the title

page, "He who sees all, abridges all," describes the very nature of the work: one must condense information in order to comprehend the totality of knowledge. Like its German counterparts, the *Dictionnaire de la conversation* achieved breadth at the expense of depth, but it was intended as a quick reference source, not an entire education program.

The thirty-fifth volume, shown here, includes entries written by Honoré de Balzac on the French kings Louis XIII, Louis XIV, Louis XV, Louis XVI, and Louis XVIII. (O. Martin)

By the end of the eighteenth century, it became increasingly apparent that the traditional encyclopedia as an all-encompassing work was an impossible ideal because of constant change in the field of knowledge. A tension developed between the *idea* of the encyclopedia and its *material* realization. For many, such as the philosopher Friedrich Wilhelm Schlegel or the poet Novalis, the fragment became the ideal expression of this conflict because it could symbolize the transition from idea to form. Its incomplete state implied a process, pointing to a future state without actually articulating it.

For Novalis, in particular, the fragment's flexibility and open-endedness made it a dynamic and creative form that allowed it to anticipate if not generate new knowledge. It would be the perfect model for a universal encyclopedia. Novalis never carried out his ambitious plans for this universal encyclopedia. His unfinished *Allgemeine Brouillon* (cat. 31) used the fragment to express the schema of an encyclopedia but not its actual detailed contents.

This reverses a phenomenon in earlier works in which fragments were nothing but details, disembodied miscellanea without a specific context. The sixteenth-century *Silva de varia lecio* (cat. 34) by Pedro Mexía, for instance, contained a variety of fragments of material that would normally appear in the margins of a major discourse. Unlike Novalis who saw the fragment as an epistemological model, Mexía piled up minutiae for their own sake. His work was simultaneously a celebration of detail and a reflection of the breakdown of the Renaissance sense of order.

Although Mexía's work lacked an explicit system of organization, his fragments encapsulated knowledge that was literally marginalized or overlooked by traditional modes of classification. By its non-hierarchical character, the miscellany provided a format for subjects that fell between the cracks of encyclopedic headings. For example, the sixteenth-century Flemish humanist Joachim Sterck van Ringelberg found much material that was excluded from the categories of the seven liberal arts. He gathered and published some of it in his work, *Chaos* (cat. 32), a humorous title that nonetheless demonstrated that traditional modes of classification were no longer considered immutable. Ringelberg's work, like Mexía's, manifested a belief that any fragment of information is worthy of recognition.

In the twentieth century the notion of fragmented knowledge became commonplace. Compilers of encyclopedias contended with the contradiction between the perpetual change of knowledge and the permanence of print: almost the minute something was published, it became obsolete. To cope with this dilemma, some encyclopedias such as *Nelson's Encyclopaedia* (cat. 35) and the *Encyclopédie Française* (cat. 36) adopted a literally fragmented notebook format in order to keep up with the rapidly changing field of knowledge. They planned to issue revised sections on a regular basis for readers to insert in their notebooks. Mobility of form would mirror the mobility of knowledge. (Dierse, Moser 1981a, Moser 1981b)

31. Novalis [Friedrich Freiherr von Hardenberg, pseud.]  
 (1772-1801)  
*Das Allgemeine Brouillon*  
 (Materialien zur Enzklopädistik 1798/99)  
 Reproduction of Manuscript Q, Leaf 40a. In the  
 collection of the Freies Deutsches Hochstift,  
 Frankfurt am Main

The *Allgemeine Brouillon* refers to the uncompleted encyclopedic project conceived by Friedrich von Hardenberg, better known by his pseudonym Novalis. Novalis's ambitious goals were to "poeticize the sciences,"

to construct a synthesis of all knowledge, and to trace its transitions and metamorphoses towards this synthesis. His unfinished work contained 1,151 *brouillons* ("rough drafts") or fragments conceived as units for a kind of scientific algebra or calculus of ideas in which their combinations would be limitless and all-encompassing. Novalis envisioned these fragments as dynamic, independent units that were simultaneously parts of a larger whole. The fragment was seen not as incomplete but as the ideal epistemological model. Indeed, the *Allgemeine Brouillon* proposed a model for the structure of an encyclopedia but not its detailed contents. (Dierse, Moser 1981a, Moser 1981b, Neubauer)

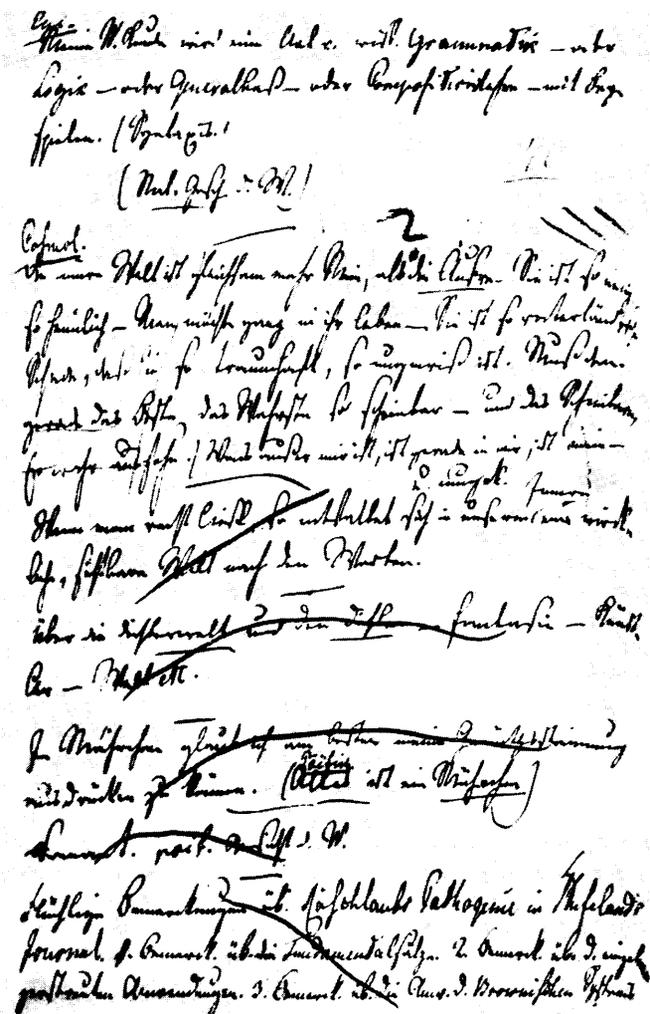


Fig. 20 *Das Allgemeine Brouillon*

32. Joachim Sterck van Ringelberg (1499-1531)  
*Chaos*  
 Antwerp: Jan Seversz & Petrus Sylvius, 1529  
 Berlin Collection

In the course of writing his *Lucubrations*, Flemish humanist and pedagogue Joachim Sterck van Ringelberg came to realize that the seven liberal arts no longer embraced all areas of knowledge. Having exhausted grammar, dialectics, and rhetoric, he created the new heading "Chaos" to include all non-categorizable information, using it as the title for a book embracing miscellaneous fragments on subjects ranging from "Christ" to "Poetry" to "Militia."

Ringelberg's description of how he wrote reveals that he viewed knowledge as consisting of many discrete bits of information. When composing a work, he stated, "I write on a wooden tablet only the title of the chapters. . . . While my memory is still fresh, I briefly develop the subject of each title, scribbling on as many pieces of paper. I attach these rough notes to the tablet under the corresponding title." Ringelberg constructed his books like mosaics, piece by piece, according each segment equal weight. (*Biographie Nationale de Belgique*, Françon, Steinberg)



Fig. 21 *Chaos*

33. Jean Tixier [Joannes Ravisius Textor]  
 (ca. 1480-1524)  
*Officina, vel potius naturae historia. . . .*  
 Basel: Bartholomaeus Westhemer, 1538  
 Library of John Matthews Manly

Jean Tixier (also known as Joannes Ravisius Textor) was a French humanist and educator. While rector of the University of Paris, he compiled the *Officina, vel potius naturae historia*, a storehouse of miscellaneous information ranging from pedagogy to fish to famous historical and literary figures. He intended it to furnish descriptions and narrations on a variety of topics for use by writers, scholars, and students; these individual fragments were to supplement the works of others.

34. Pedro Mexía (1496-1552)  
*Selva di varia lettione. . . .*  
 Venice: Giorgio de Cavalli, 1564  
 Gift of Claire Dux Swift

Spanish historian Pedro Mexía first published his *Silva de varia lecion* in 1542. The *Selva di varia lettione* on display here is the 1564 Italian edition translated by Mambrino Roseo and augmented by Francesco Sansovino (1521-1586). In the seventeenth century the work was also translated into French (Claude Gruget) and English (Thomas Fortescue), testimony to its enduring popularity.

Fortescue described the *Silva* as “a collection of divers and sundry matters.” These “matters” are what would commonly form a sub-text or footnotes of a primary text; they consist of anecdotes and miscellaneous facts. Mexía valued fascinating fragments of information more than an overarching system of organization, and plenitude and diversity over universality and harmony. The title of Mexía’s work symbolizes its conscious randomness: *Silva* means forest and the readers are like hunters for knowledge who must relish what they capture.

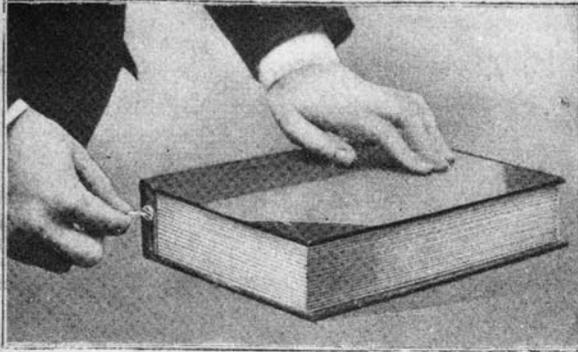
35. *Nelson’s Encyclopaedia*  
*Everybody’s Book of Reference*

12 vols. New York [etc.]: Thomas Nelson & Sons,  
 1907. Purchase of the Library’s General Book Fund

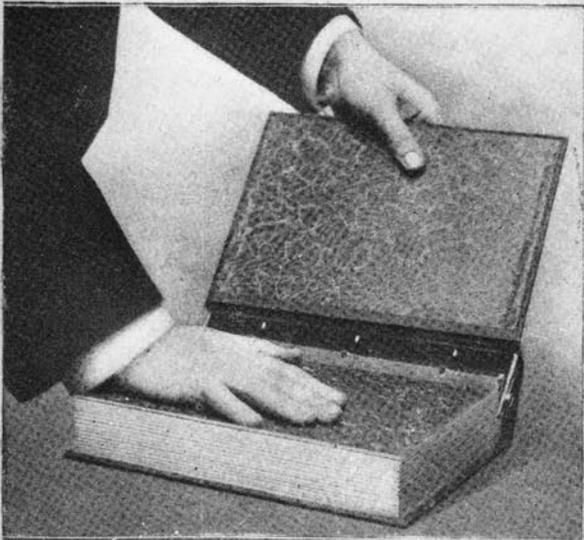
*Nelson’s Encyclopaedia*, later called *Nelson’s Perpetual Loose-leaf Encyclopaedia*, is composed of literal fragments. Hoping to keep information continually current, its editors adopted a notebook format that could be updated continuously by revising and adding information. The owner of the encyclopedia, as instructed in the illustration (fig. 22), was to unfasten the screw-lock on the binding and insert the new pages issued twice a year. (Collison 1964)

**By a glance at the illustration on this page the simplicity of Nelson's Patent Binder is obvious.**

**1st**—To unlock the volume place the left hand on the volume, as shown in the first illustration, then loosen the screw at the top and bottom.



**2nd**—Place the right hand on the pages, as shown in the second illustration, and with the left hand raise the cover. The pages will then be free for you to insert new or substitute rewritten pages. To avoid mistakes the new and rewritten pages will always be dated.



**3rd**—To lock the volume fit the pins in the upper part of the cover into the posts holding the sheets, then press down the cover and tighten the screws. Two or three turns are sufficient to lock or unlock the volume.

Fig. 22 Nelson's Encyclopaedia

36. *Encyclopédie Française*. . . .

21 vols. Paris: Société Nouvelle de l'Encyclopédie Française, 1933-1962

Purchase of the Library's General Book Fund

Anatole de Monzie, the French Minister of Education in 1932, was responsible for initiating the *Encyclopédie Française*. Monzie enlisted as editor Lucien Febvre, noted historian and co-founder of the *Annales* school. In his proposal for the encyclopedia, Febvre stated the ideal encyclopedia should express the central problems of each field of knowledge while avoiding the rote enumeration of "known" facts. Febvre described the distinction between these two functions as making something "understood" (*faire comprendre*) versus making something "known" (*faire connaître*). He envisioned the encyclopedia as a "living" organism and the revisable notebook form was central to this idea, allowing the work to keep pace with the transformations of knowledge.



Fig. 23 *Encyclopédie Française*. . . .

The *Encyclopédie Française* was an ambitious, if not heroic project. Conceived in reaction to the growing totalitarian regimes of the 1930's, it was to constitute, Monzie wrote, a "national contribution to an international enterprise which is intellectual peace by cooperation." Unfortunately, the encyclopedia failed to attract a wide readership because the editors' refusal to adopt an alphabetic arrangement and their use of broad headings such as "Everyday Civilization," "The Social Universe," and "Psychological Life" intellectually alienated most readers. (Robichez)

# 6 THE ILLUSTRATED ENCYCLOPEDIAS: KNOWLEDGE SENSUALIZED

The most common conception of a modern encyclopedia is probably that of a set of books featuring illustrations. This demonstrates an important point: certain subjects cannot be articulated completely with words alone. Images often convey ideas more succinctly than words and help the viewer conceptualize what is not present, a quality that makes illustration a powerful didactic tool. Unlike word-oriented works like Bayle's *Dictionnaire historique et critique* (cat. 23) which appeals to the rational faculties, illustrated encyclopedias take advantage of the immediacy and materiality of imagery to appeal to the sensory faculties.

In the sixth century St. Gregory called images books for the illiterate. The Church employed visual symbols in many media to communicate God's message to all. The tremendous advantage of imagery was its capacity to materialize abstract concepts, as in the twelfth-century encyclopedia *Hortus Deliciarum* (cat. 37) which illustrated allegorically the spiritual destiny of man.

The seventeenth-century pedagogical reformer Johann Amos Comenius used illustration to make abstract concepts more comprehensible to children in his visual encyclopedia *Orbis sensualium pictus* (cat. 38). He reasoned that images are more universal and easier to grasp than words because sight is the strongest of the senses and the earliest to develop.

In encyclopedias that emphasize the arts and sciences, illustration becomes fundamental in explaining technological processes. Almost all of the illustrations in the eighteenth-century *Encyclopédie* or the *Recueil de planches* (cat. 40) depicted the production and use of material objects. The preface to the *Encyclopédie* acknowledged the efficacy of illustration: "A pure and simple dictionary of definitions without illustration can only fall into vague and obscure descriptions. . . . One glance of the eye upon an object . . . tells more than an entire page of discourse."

Finally, the popular appeal of illustration is undeniable. The proliferation of imagery after 1830 reached such intensity that modern culture became a visual culture. Technological inventions facilitated the mass production of images, but illustration was also part of the larger phenomenon of commercialization. In pictorial encyclopedias like *Le Magasin pittoresque* (cat. 41) illustration was more than a means to popularize knowledge. It created a kind of allure and immediacy often beyond the capacity of words. (Adhémar, Barthes, Eco 1986, Melot, Saxl, Steinberg)



Fig. 24 Herrad von Landsperg, Aebtissin zu Hohenburg, . . . und ihr Werk: "Hortus Deliciarum"

37. Christian Moritz Engelhardt (1775-1858)  
*Herrad von Landsperg, Aebtissin zu Hohenburg, . . .  
 und ihr Werk: "Hortus Deliciarum"*  
 2 vols. Stuttgart: In der J.G. Cotta'schen  
 Buchhandlung, 1818. Purchase of the  
 Library's General Book Fund

The *Hortus Deliciarum* (Garden of Delights) was compiled in the late twelfth century by Herrad, abbess of Hohenberg in Alsace, to provide the nuns in her abbey with a synthesis of biblical and religious literature. This extraordinary encyclopedia featured over six hundred illustrations that not only addressed those nuns who were illiterate, but also served to animate Herrad's didactic text. The "Ladder of Virtue" (fig. 24), for instance, vividly depicted the path to

eternity with personifications acting out the triumphs and failures of the ascent.

A fire during the siege of Strasbourg in 1871 destroyed the original manuscript of the *Hortus deliciarum*. Fortunately, in 1818 historian Christian Moritz Engelhardt had published hand-colored engravings of the illustrations, so this important compendium of medieval imagery was not completely lost. (Engelhardt, Saxl, Straub and Keller)

38. Johann Amos Comenius (1592-1670)  
*Orbis sensualium pictus. . .*

Nuremberg: Heirs of M. & J.F. Endter, 1679  
 Jernegan-Littlefield Collection

The *Orbis sensualium pictus* (The Visible World in Pictures) first appeared in 1658 and was reprinted and translated continuously for two centuries. Comenius was a Czech Protestant theologian seeking to reform outmoded teaching methods for children that emphasized the rote memorization of grammar. He argued that illustration should replace grammar as the focal point in teaching children language. The child's mind, he wrote, does "not as yet raise itself to an abstracted contemplation of things." Thus, the visible world provides the best tools for



Fig 25 *Orbis sensualium pictus. . .*

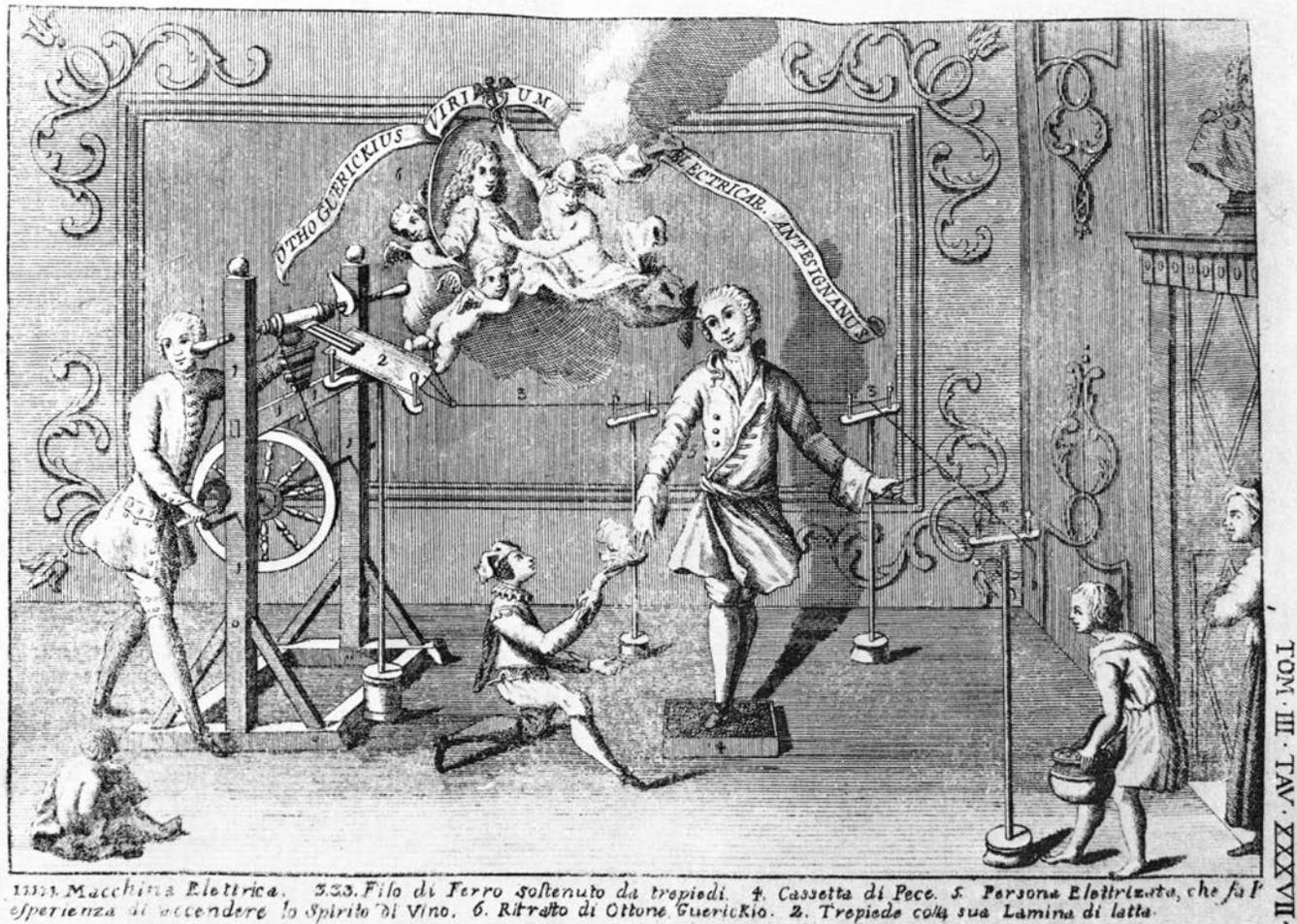


Fig. 26 *Nuovo dizionario, scientifico e curioso, sacro-profano*

instruction. The word “clock” (fig. 25), for example, becomes more tangible with corresponding illustrations because images impress themselves upon the mind more readily than words. (Adhémar, Sadler)

39. Giovanni Francesco Pivati (1689-1764)  
*Nuovo dizionario, scientifico e curioso, sacro-profano*  
 10 vols. Venice: Benedetto Milocco, 1746-1751  
 Purchase of the Library’s General Book Fund

The first serious encyclopedia in Italian was compiled by Giovanni Francesco Pivati, secretary of the Academy of Sciences in Venice. Pivati’s work was an appeal for

modernization in the midst of Venice’s political and cultural decline, and its illustrations were an important means of conveying up-to-date information. A plate depicting the use of electricity to treat physical ailments (fig. 26), for instance, promoted the use of new and experimental technology. The strong emphasis on cultural anthropology and natural history throughout the illustrations testifies to an awakening interest in the documentation of new discoveries and to the acknowledgment that knowledge was expanding. (Garofolo)

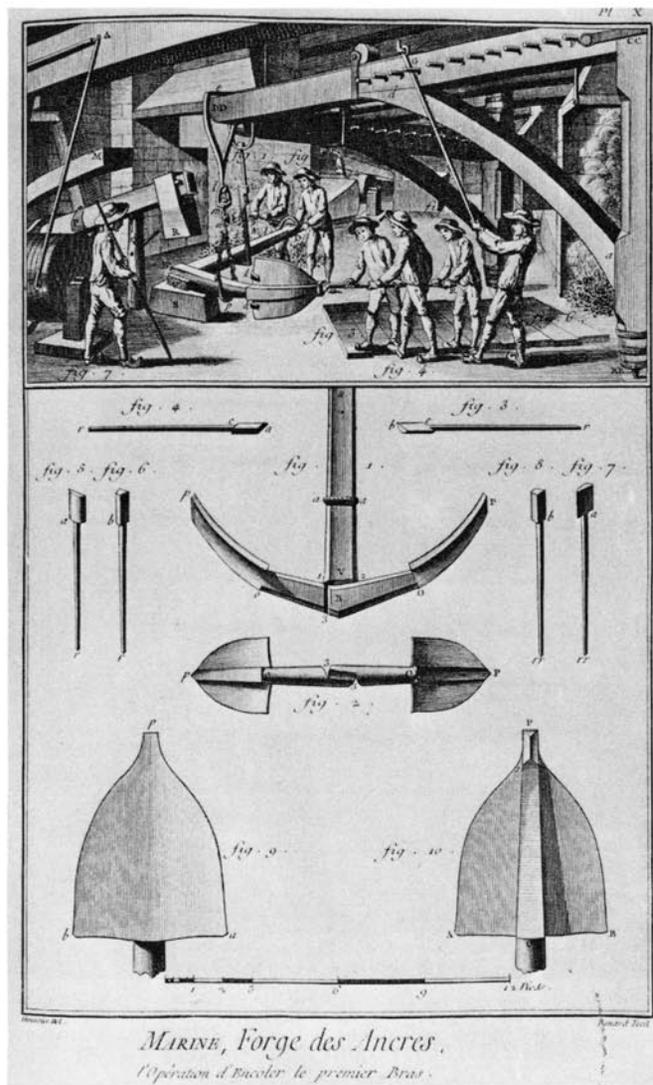


Fig. 27 *Recueil de planches, sur les sciences, les arts libéraux et les arts mécaniques, avec leur explication*

40. *Recueil de planches, sur les sciences, les arts libéraux et les arts mécaniques, avec leur explication*

II vols. Paris: Briasson, Le Breton, 1762-1772

Purchase of the Library's General Book Fund

Although published to accompany the main body of the *Encyclopédie* (cat. 43), the *Recueil de planches* was in many ways an independent endeavor. The illustrations appeared in separate volumes which the publishers did not even begin to issue until eleven years after the first volumes of

text had appeared. This time lapse compelled Diderot to write the *Description des arts*, a new text coordinated more closely with the plates. This does not compromise the importance of the illustrations, which filled eleven folio volumes focusing on subjects largely neglected by French philosophical discourse: the arts and trades.

The illustrations for "Anchor forging" (fig. 27) are from the pen of the principal illustrator of the *Recueil de Planches*, Louis-Jacques Goussier, a mathematician and physician who traveled throughout France to observe the inner workings of trades and industries. His images serve as a kind of illustrated reportage, succinctly describing complex processes while showing the viewer scenes normally inaccessible to the public. (Barthes, Pinault, Proust)

41. *Le Magasin pittoresque*

Paris: Jouvett et Cie [etc.], 1833-1938

Purchase of the Library's General Book Fund

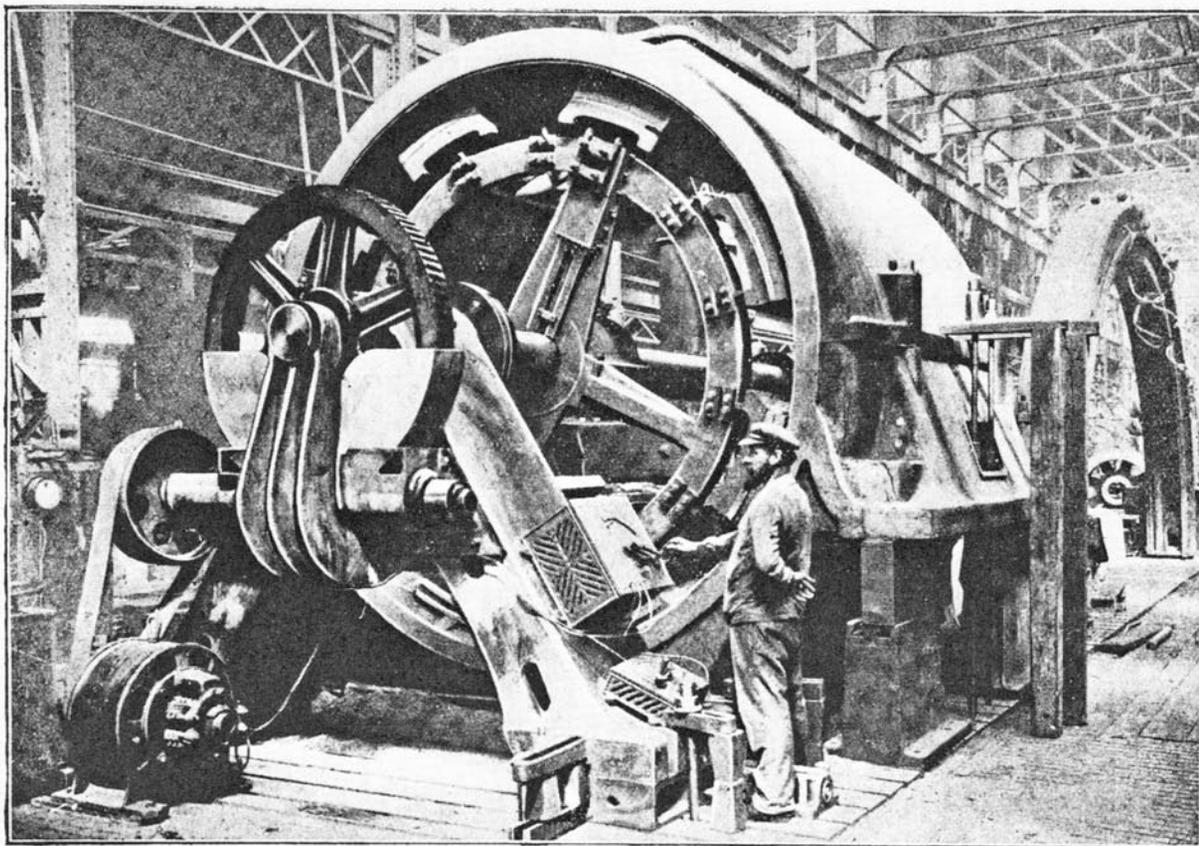
Édouard Charton launched his *Magasin pittoresque* in 1833, clearly stating in its first issue his debt to the English magazines of Charles Knight. The primary objective of the "magazine," a term originally meaning "storehouse," was to present a variety of subjects in an inexpensive and intellectually accessible format. The weekly *Magasin pittoresque* was the encyclopedia for the common man, providing, Charton claimed, a general education similar to the "grand tour" of the wealthy, filled with "distinguished men, varied and selected reading and . . . souvenirs of voyages." Illustration added an immediacy to the text, uniting curiosities from all corners of the earth in a single work (fig. 28). The invention of wood engraving in the early nineteenth century made this goal economically feasible since it enabled rapid and mass reproduction of images without great compromise in quality. (Martin, Melot)

## OISEAUX DE PARADIS.



(Les oiseaux de paradis.)

Fig. 28 *Le Magasin pittoresque*



USINAGE D'UN TURBO-ALTERNATEUR. La production du courant électrique a lieu dans de puissantes machines actionnées par des moteurs mécaniques : turbines hydrauliques ou à vapeur, moteurs à gaz ou à essence, etc. Notre photographie montre un alternateur de 45 000 kw. en construction, dans les ateliers de la Société alsacienne de constructions mécaniques.

Fig. 29 *Encyclopédie par l'image*

42. *Encyclopédie par l'image*

Paris: Librairie Hachette, 1924-[?]

Purchase of the Library's General Book Fund

The *Encyclopédie par l'image* was published by the Librairie Hachette, a French publishing house founded in 1826 by Louis Hachette. Although the first issue of the *Encyclopédie par l'image* appeared nearly a hundred years later in 1924, it still embodied the concerns of Hachette's original founder: education and a keen interest in the "new" and modern. The encyclopedia was issued in separate booklets, echoing the form of Louis Hachette's nineteenth-century educational manuals, and ranged among such diverse topics as

"Motors" (fig. 29), "Romanticism," and "Napoleon." The series was such a success that the "Napoleon" issue sold a record 280,000 copies.

The influence of popular journalism on the *Encyclopédie par l'image* is evident in its extensive use of photography and its distribution in serialized booklet form. Like the *Magasin pittoresque* (cat. 41), the *Encyclopédie par l'image* is encyclopedic by virtue of its extended topical range, but it lacks a coherent ideological system giving shape to the whole. It is a repository of images that seeks to please a mass audience. (Duchet-Suchaux)

# 7 THE ENCYCLOPÉDIE

## RECONSIDERED: NEW MARKETS, NEW FORMATS, NEW ENCYCLOPEDIAS

The *Encyclopédie* (cat. 43) edited by the affluent *philosophes* Denis Diderot and Jean Le Rond d'Alembert represented a monument to Enlightenment thought, and its far-reaching influence is well documented. What is perhaps less known is that the work was an enormous commercial success. Robert Darnton tells us in his fascinating study of its publishing history that the *Encyclopédie* was a best seller, and its subsequent editions, produced independently of the original editors, were revised in format or content in order to exploit a larger market.

Since the folio size of the original edition had been priced beyond the reach of most readers, subsequent publishers marketed the *Encyclopédie* in less expensive quarto (cat. 45 and 47) and octavo volumes (cat. 46). These smaller editions were more convenient and also appealed to the modern sensibility, since thick folio books seemed a vestige of the Baroque age. The *Esprit de l'Encyclopédie* (fig. 48), for example, an octavo edition of selected articles from the *Encyclopédie*, claimed superiority over the bulky folios whose size prevented carrying them to the countryside. Furthermore, the *Esprit* edition offered more pleasurable reading since it included only the most interesting articles. The single-volume encyclopedia like the *Encyclopédie portative* (cat. 49) was another example of the demand for streamlined, pre-selected works: they spared the reader any struggle with cross-references, veiled remarks, and the lengthy diatribes found in the original *Encyclopédie*.

Non-French publishers of the *Encyclopédie* made additional emendations. They corrected some of its Franco-centric bias and tempered the brazen tone and secularized world view that had offended many readers by challenging church and state. In the Lucca folio edition (cat. 44), for instance, a priest appended notes to certain audacious articles in order to appease the pope. The Swiss Yverdon edition (cat. 47) deleted articles pertinent only to French readers and injected a note of modesty into the encyclopedic project. The French editors claimed to lay the foundations of all knowledge, but this edition conveyed the pietistic message that mortals could never know all things.

Diderot's *Encyclopédie* also inspired an entirely new class of encyclopedias. The compilers of these works noted not only the success of the *Encyclopédie*, but what they felt to be its fundamental errors in organizing and presenting knowledge. The greatest difficulty for readers of the *Encyclopédie* was its alphabetic organization which arranged knowledge arbitrarily, often fragmenting and dispersing a subject throughout several articles. The *Encyclopédie méthodique* (cat. 50) and the *Encyclopaedia Britannica* (cat. 51) redressed this problem in different ways: the *Méthodique* responded to the modern impetus toward professional specialization by creating a gargantuan work comprising many sub-encyclopedias, while the *Britannica* addressed the well-rounded gentleman in essay form, treating each topic in an individual and coherent treatise. (Birn, Collison 1964, Darnton, Jammes, Rétat)

43. *Encyclopédie, ou Dictionnaire*

*raisonné des sciences, des arts et des métiers*

35 vols. Paris: David, Briasson, LeBreton, Durand,  
1757-80. Purchase of the Library's General Book Fund

Originally intended as a two-volume French adaptation of Chamber's *Cyclopaedia* (cat. 20), the *Encyclopédie* (fig. 30) quickly became monumental in proportion as well as ambition. Under the editorship of *philosophes* Denis Diderot and Jean Le Rond d'Alembert, the encyclopedia was not to be a compendium to preserve human and divine knowledge but rather a tool for *change*. "A good dictionary," Diderot wrote, is one "that changes the common way of thinking." By encouraging readers to examine the world independently and critically, the *Encyclopédie* threatened to undermine the traditional authorities of church and state.

Although organized alphabetically like a dictionary, the *Encyclopédie* employed extensive cross-references to establish continuity among articles. Using cross-references to compare and contrast ideas, the ideal reader would begin to make juxtapositions. This audacious system upset traditional hierarchies, endowing readers with the capacity to discover knowledge themselves. (Anderson, Brewer, Hahn)

44. *Encyclopédie, ou Dictionnaire*

*raisonné des sciences, des arts et des métiers*

28 vols. Lucca: Vincent Giuntini, 1758-1776  
Purchase of the Library's General Book Fund

Ottavio Diodati directed the first folio reprint of the *Encyclopédie* (fig. 31) in the Republic of Lucca in Tuscany between 1758 and 1776. Since the project began almost immediately after the French original appeared, it made few substantive changes despite criticisms concerning errors found in the original text on subjects such as Italian



Fig. 30 *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*

geography. The only emendations were in footnotes which grew sparser as the edition progressed.

In 1770-1778 another folio reprint, the Leghorn edition, appeared in Italy. The publishers of the Paris *Encyclopédie* viewed both as pirated editions and did everything possible to keep them out of France. In their own territory, however, they sold well and were proudly protected; the Lucca edition is dedicated to the republic's senate, the Leghorn edition to the archduke of Tuscany, Pietro Leopoldo.

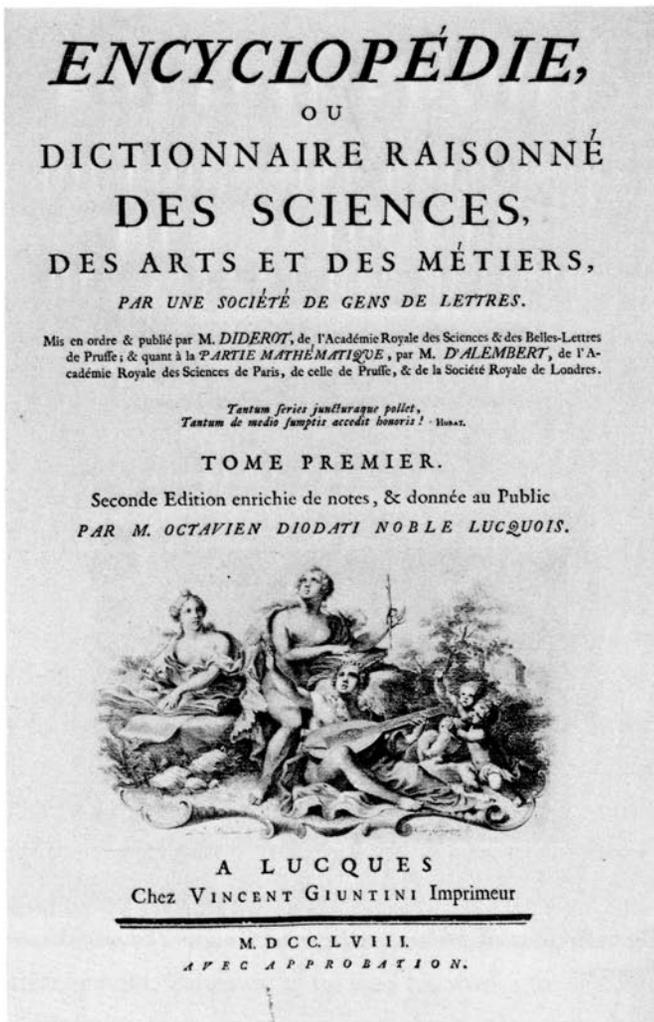


Fig. 31 *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*

45. *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*

36 vols. Geneva: Pellet, 1777-1779. Purchase of the Library's General Book Fund

The *Encyclopédie* reached most of its eighteenth-century readers in quarto format. So great was the demand for it that by 1777, the year that the Pellet edition was launched, thirty Geneva presses were involved in producing the quarto edition. Despite the fundamental Swiss role in printing the quarto, the name "Pellet" of Geneva is actually

a false name; the French printer Joseph Duplain of Lyons was forced to borrow a Swiss name since the *Encyclopédie* was still censored by the French state. Duplain worked with Charles Joseph Panckoucke, the official owner of publishing rights for the *Encyclopédie*. Together they were the prime movers behind the quarto editions, but they coordinated their efforts carefully with Swiss publishers, particularly the Société Typographique de Neuchâtel. (Darnton)

46. *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers*

36 vols. Lausanne and Bern: Sociétés Typographiques, 1778-1782. Purchase of the Library's General Book Fund

The octavo edition of the *Encyclopédie* produced between 1778 and 1782 was a pirated edition of the Pellet quarto (cat. 45), but since pirating was common practice in the eighteenth century, there was no legal recourse available to the quarto publishers to stop it. Despite the octavo's lower price, the quarto remained the most popular size of the *Encyclopédie*.

Like the quarto edition, the octavo cut production costs by reducing the number of illustrations; instead of eleven volumes, only three were produced. Moreover, the octavo purged all *luxe typographique*—wide margins, consistent paper weight, solid typeface—to reduce costs further, thus making the work available to a wider audience than the original folio *Encyclopédie*. Encyclopedism was no longer the domain of the privileged. (Darnton)

47. *Encyclopédie, ou Dictionnaire universel raisonné des connoissances humaines*  
58 vols. Yverdon, 1770-1775. Purchase of the  
Library's General Book Fund

Fortunato Bartholomeo de Felice, an Italian monk, compiled the Yverdon edition of the *Encyclopédie*. It responded to the demand for a more affordable version and featured a modest tone that tempered the nationalism and materialist pomposity of the French original.

A comparison of the French and Swiss title pages immediately demonstrates their differences: the lush French engraving by Cochin (fig. 30) portrays Theology on her knees before Reason, Philosophy, Science, and the Arts, whereas the sparse engraving of the Yverdon edition (fig. 32) portrays Civic Virtue and Divine Wisdom on equal footing. This pious version sold mainly in Holland and Germany. Perhaps its success would have been greater had it not taken ten years to prepare. (Darnton)

48. *L'Esprit de l'Encyclopédie, ou choix des articles les plus agréables, les plus curieux et les plus piquans de ce grand dictionnaire*  
13 vols. in 7. Paris: Fauvelle et Sagnier, 1798-1808  
Purchase of the Library's General Book Fund

Abbé Joseph de La Porte compiled *L'Esprit de l'Encyclopédie* in 1768. Its success was so great that subsequent editions were reissued until 1822. Its streamlined size and selection of the "most agreeable, curious, and lively" articles from the *Encyclopédie* combined to make enlightenment more entertaining and convenient. Hoping to attract those with little time for self-instruction, this edition offered an "abridged library" which could procure "in those fugitive moments the pleasure of instructing. . . while amusing oneself."

ENCYCLOPÉDIE,  
O U  
D I C T I O N N A I R E  
UNIVERSEL RAISONNÉ  
D E S  
C O N N O I S S A N C E S H U M A I N E S.

Mis en ordre par M. DE FELICE.

E renebris tantis tam clarum tollere lumen  
Quis potuit? LUCRET.

T O M E I.



Y V E R D O N ,

M. D C C L X X.

Fig. 32 *Encyclopédie, ou Dictionnaire universel raisonné des connoissances humaines*

49. *Encyclopédie portative, ou Science universelle, à la portée de tout le monde*  
Berlin: Chez tous les libraires, 1758  
Bequest of Bernard Weinberg

This anonymous duodecimo work addressed a polite audience of *amateurs*. Nothing remained of Diderot's and d'Alembert's original work except the word "Encyclopédie," which had become a fashionable term by the mid-eighteenth century. Nevertheless, the author assured any wary readers that this term need not "revolt" them, explaining that the work was not as strenuous to read as its title implied. Its unassuming size, decorative script, and sparse text also serve to convince the reader that the text was

easily digested. Moreover, to appease those who were offended by the secular world view presented in the *Encyclopédie*, the author restored God to a prominent position by dividing the “Universal whole” into three parts: God, the individual, and the world.

50. Jean Baptiste Pierre Antoine de Monet de Lamarck  
(1744-1829)

*Encyclopédie méthodique. Botanique*

13 vols. Paris: Panckoucke, [etc.], 1783-1808

The John Crerar Collection of Rare Books in the  
History of Science and Medicine

The *Encyclopédie méthodique* was launched in 1782 by Parisian publishing magnate Charles Joseph Panckoucke, who had already mass produced the *Encyclopédie* in quarto form (cat. 45). He intended his new project not only to rectify the gaps in the original *Encyclopédie* but to surpass it: the *Encyclopédie méthodique* was to be the “encyclopedia of encyclopedias.”

To unify the subjects fragmented by Diderot’s arrangement, Panckoucke divided his work into separate disciplines, each having its own dictionary, and chose writers who were renowned specialists rather than the generalist *philosophes* or *amateurs* who had contributed to Diderot’s *Encyclopédie*. The *Dictionnaire Botanique*, for example, was written by the Chevalier de Lamarck, who held appointments at the Jardin du roi, the Académie des sciences, and the Société royale de l’agriculture.

The *Méthodique* was a monumental failure. The project became unmanageable, growing to 166 and one-half volumes before it was finally brought to a halt in 1832, many years after Panckoucke’s death. Ironically, his new structure created a greater separation between disciplines because there was no unifying vision governing the entire work. (Collison 1964, Darnton)

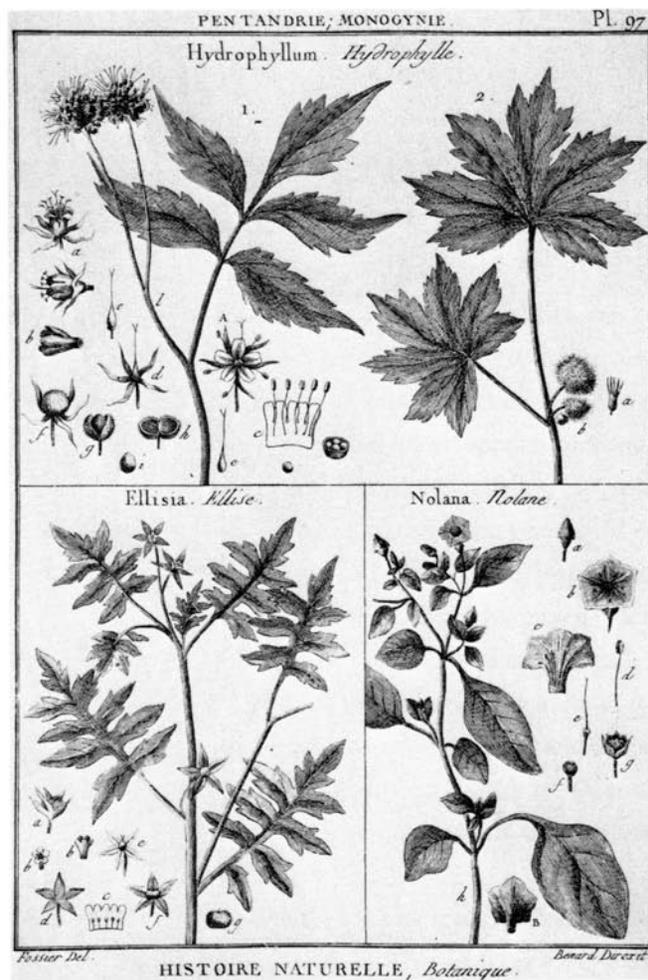


Fig. 33 *Encyclopédie méthodique. Botanique*

51. *Encyclopaedia Britannica;*  
*or A dictionary of arts and sciences*

London: 3 vols. Edward and Charles Dilly, 1773

Gift of the Friends of the Library

The first edition of the *Encyclopaedia Britannica* appeared in Edinburgh in 1771. Probably a pirated edition, the 1773 London edition shown here omitted the names of the three original collaborators: Andrew Bell, engraver; Collin Macfarquhar, printer; and William Smellie, antiquarian scholar and printer. These early editions included beautiful illustrations designed by Bell, such as the plates that accompany the article on astronomy (fig. 34).

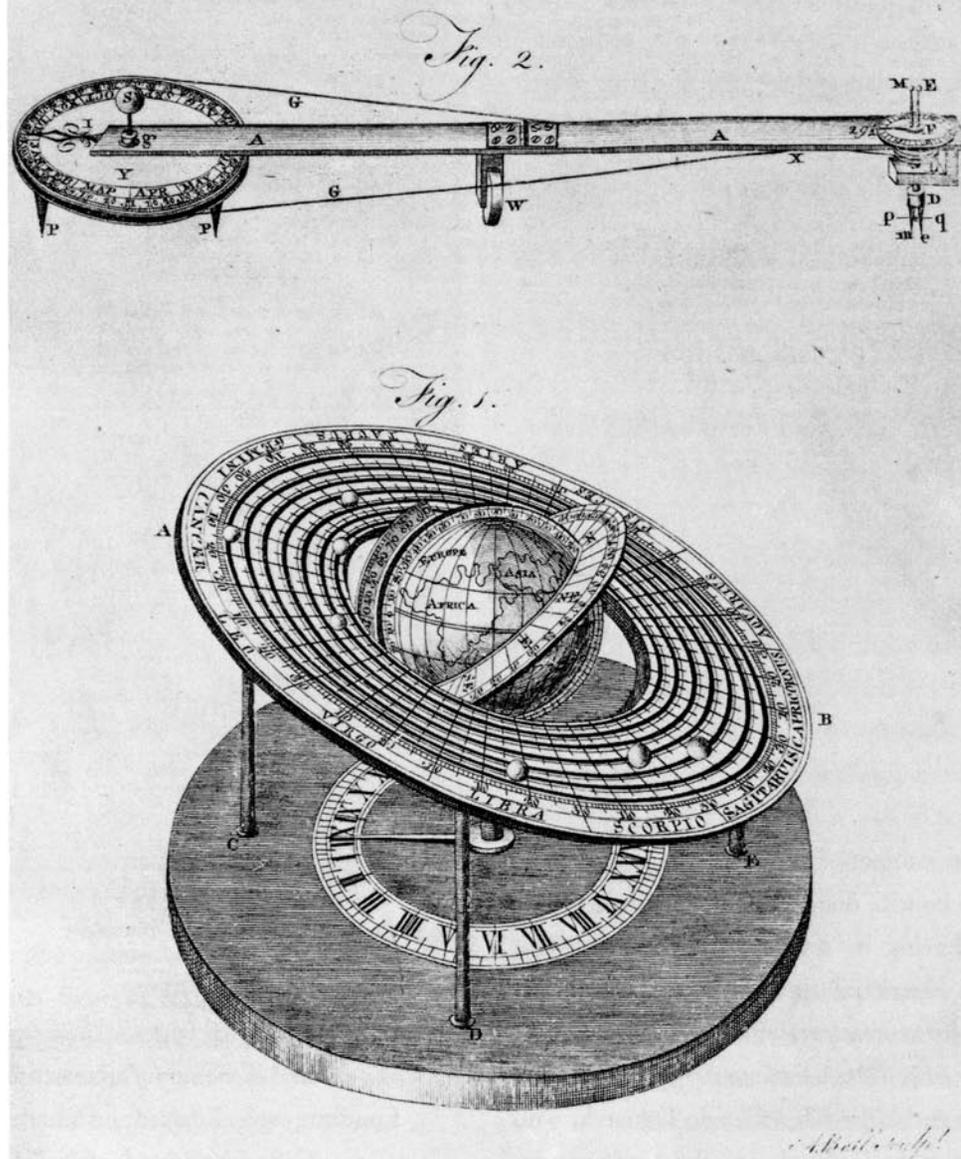


Fig. 34 *Encyclopaedia Britannica; or A dictionary of arts and sciences*

The preface to the *Britannica* criticized the dictionary form for its superficial treatment of topics. In contrast, the “New Plan” proposed by the *Britannica* would incorporate seventy-five long treatises interwoven with shorter articles. Although an alphabetic order was still used, the treatises, such as “Anatomy” or “Commerce,” contained all relevant information under one heading.

In addition to this implied criticism of the

*Encyclopédie*’s organization, a statement made by the editors of the 1801 edition of the *Britannica* reveals that the original *Britannica* also intended to counteract the atheistic and anarchistic tendency “of that pestiferous work.” The Scots envisioned the encyclopedia as a storehouse for utilitarian information, not as a propagandistic tool. (Collison 1964, MacArthur)

# 8 THE THREE-DIMENSIONAL ENCYCLOPEDIA: THE LIBRARY, THE *WUNDERKAMMER*, THE MUSEUM

In the middle of the eighteenth-century the French *philosophe* and encyclopedist d’Alembert compared libraries to “miniature houses of the universe,” an allusion to attempts to personalize the universe by replicating it in libraries. Until the nineteenth century, forming a comprehensive library was a way of gathering the teachings and discoveries of the world in one location. Libraries represented, in a sense, concrete manifestations of the ideal encyclopedia—they were three-dimensional encyclopedias. Like the publication of an encyclopedia, the formation of a library was fraught with problems such as the classification of knowledge and the nature of the audience. Should the material of a given field be represented by general or specific examples? Should access to this knowledge be universal or select, public or private?

With the advent of printing and the dramatic increase in scientific discoveries, an encyclopedic library became an ideal rather than an attainable goal. Its pursuit was limited to elite circles and powerful institutions. Works like Gabriel Naudé’s *Instructions Concerning Erecting of a Library* (cat. 54) served as inventories of important books and provided guidelines for selecting titles. In the late seventeenth century, collections, especially private ones, became more specialized and books like Limiers’s *Idée generale des études* (cat. 55) provided an outline for stocking and arranging different kinds of libraries. With comprehensiveness no longer feasible, it was important to select a few well-known books that would represent an entire field.

Like the library, the museum or *Wunderkammer* (a cabinet of curiosities or “wonders”) is a physical manifestation of the encyclopedia, with objects replacing books. The proliferation of these collections from the sixteenth century to the present demonstrates the human desire to recreate the natural world within a controlled environment. Sixteenth- and seventeenth-century natural science museums like those of Ferrante Imperato (cat. 56) or Ole Worm (cat. 57) represented serious efforts to construct microcosms of the natural world and to understand it through empirical study. These collectors not only sensualized knowledge but personalized it by selectively tailoring their microcosms to their interests and taste.

Forming collections also satisfied the urge to possess—knowledge itself became an object that could be owned, bringing status and power. The museum of Athanasius Kircher at the Jesuit College in Rome (cat. 61), for instance, gave the Jesuit order and the Catholic church a means to display their status. Their support of “scientific” endeavors was visible not only in Kircher’s experiments, but in the diverse ethnic materials brought back from faraway lands, trophies of Jesuit missions.

The evolution of museums and libraries represents an important phase of encyclopedism—the institutionalization of the encyclopedia. Institutions have, as Michael Hunter explains, “a corporate life beyond the lives of their members, thus offering a potential guarantee of indefinite continuity.” Museums lend an element of permanence to human endeavor: the physicality of objects renders concrete and immutable the temporality of history, culture, and civilization. The preface of *Museum Britannicum* (cat. 63) expressed an explicit hope that the museum would “leave some little Monument, to point out that we once existed.” The institutionalization of encyclopedism bolstered human security, providing not only a sense of permanence but a means to control and order knowledge, thereby reducing the element of the unexpected. (Balsiger, Clifford, Grinke, Hunter, Olmi)

52. Conrad Gesner (1516-1565)

*Bibliotheca universalis*

Zürich: Christoph Froschauer, 1545

The John Crerar Collection of Rare Books in the  
History of Science and Medicine

Among the long list of his achievements, Conrad Gesner was one of the founders of modern zoology and of bibliography. His *Bibliotheca universalis* was a voluminous compilation of European authors and their works through the Renaissance, including eighteen hundred authors and ten thousand titles. Gesner organized the work alphabetically by author's name, providing a critically annotated checklist of their books.

The first volume of Gesner's *Pandectarum sive Partitionum universalium* was, in a sense, an appendix to the *Bibliotheca universalis* with a general subject index of authors and titles. In the *Pandectarum*, which he never completed, Gesner attempted to classify all knowledge in twenty-one subjects, each represented by one book.

Gesner's ambitious "universal" and "all-embracing" compilations were efforts to build encyclopedic bibliographies to serve both practical and religious ends. A kind of press agent for his patron-publishers like Froschauer who printed the *Bibliotheca universalis*, he furnished names of publishers in his lists of book titles. On a more elevated level, Gesner was a devout Swiss Protestant with an urge, in Elizabeth Eisenstein's words, "to comprehend the divine scheme for creation and to classify and order all of God's creatures." (Eisenstein)

53. Antonio Francesco Doni (1513-1574)

*La Libreria del Doni* . . .

Venice: Gabriel Giolito De'Ferrari, 1558

Purchase of the Library's General Book Fund

It is no surprise to find *La Libreria* published in Venice, one of the largest printing centers in sixteenth-century Europe. With the invention of movable type, the number of books

produced and disseminated increased dramatically. Doni compiled this list of authors with brief biographical information to guide readers through the vast numbers of books on the market. He wrote in Italian for a general audience, listing only Italian authors and works in Italian translation.

54. Gabriel Naudé (1600-1653)

*Instructions Concerning Erecting of a Library*

Translated by John Evelyn. Cambridge: Houghton,  
Mifflin & Company, at the Riverside Press, 1903  
Bequest of Lessing Rosenthal

Gabriel Naudé was probably the first individual to make a career of librarianship. During his lifetime he oversaw some of Europe's most esteemed collections, including the libraries of Henri de Mesme, Cardinal Bagni, Cardinal Barberini, Cardinal Mazarin and, briefly, those of Cardinal Richelieu and Queen Christina of Sweden.

Naudé was among the first to advocate public use of libraries. When working for Cardinal Mazarin, for instance, he convinced the cleric to make his library accessible to the public at certain designated hours. He argued that a library's organization should not reflect the idiosyncrasies of a single collector, but adhere to a more universal plan. In the 1627 edition of *Instructions Concerning Erecting of a Library*, he wrote: "I conceive that arrangement to be always the best which is easiest, least intricate, most natural, most used. . . ." Naudé devised a more elaborate system of classifying books than the traditional triad of "Morals," "Sciences," and "Devotion." His scheme followed, more or less, the disciplines established by universities: medicine, law, theology, philosophy, and so on. Within each he created other classifications, proceeding from "the most universal and ancient" to the most recent. Naudé emphasized the importance of separating commentaries and interpretations from original texts, thus distinguishing between

PLAN DE L'ORDRE D'UNE BIBLIOTHEQUE DIVERTISSANTE ET CURIEUSE

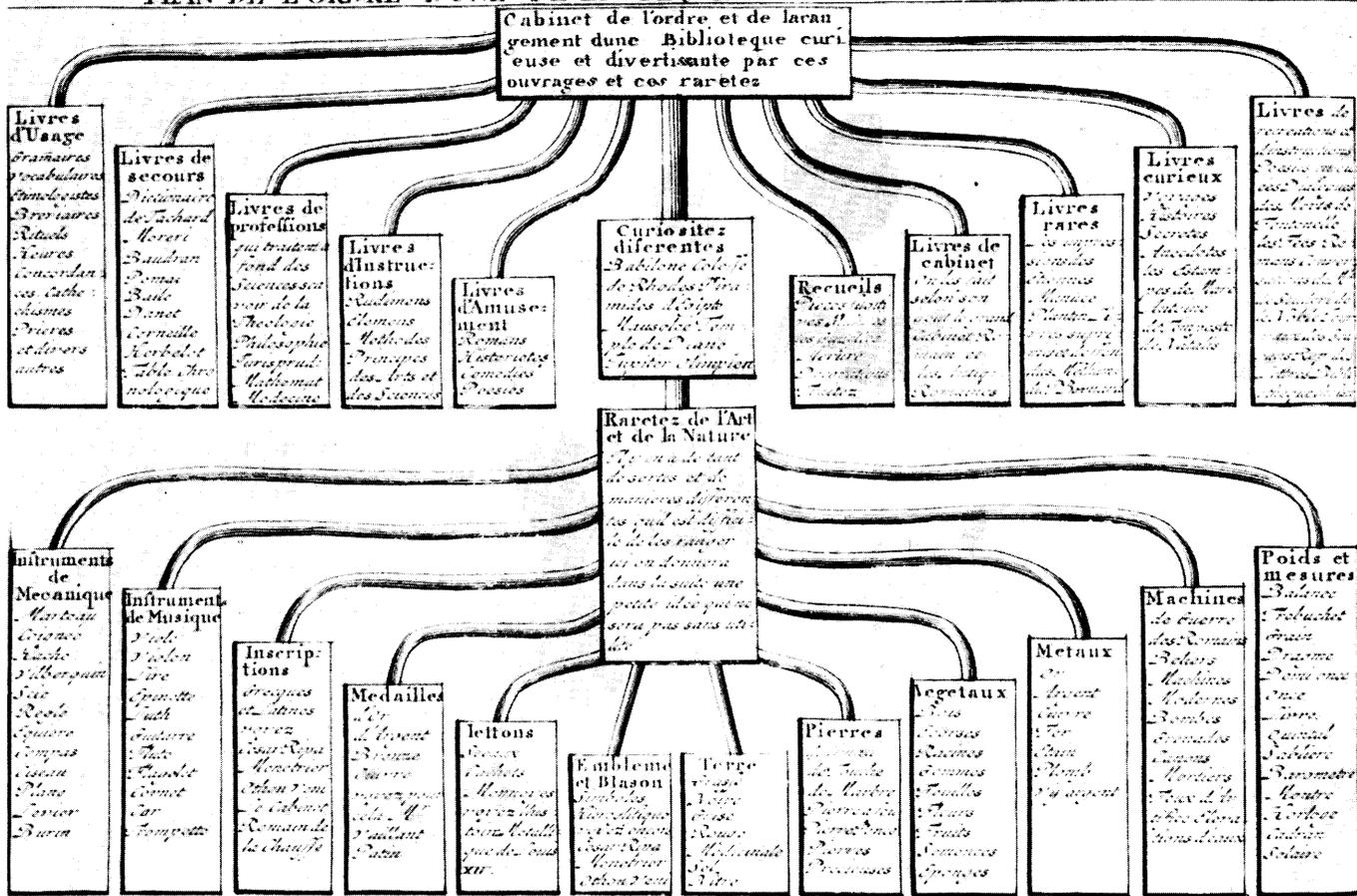


Fig. 35 Idée générale des études. . . .

primary and secondary sources.

The edition shown is a limited edition reprint using John Evelyn's seventeenth-century translation. (Taylor, Viardet)

55. [Henri Philippe de Limiers(d. 1725)]

*Idée générale des études. . . .*

Amsterdam: Frères Chatelain, 1713

Purchase of the Library's General Book Fund

Limiers intended his *Idée générale des études* as a sequel to Sieur de Chevigny's *La Science des personnes de la cour, de l'épée et de la robe. . .* (1706). Like its predecessor, it served

as a guide for young nobles, providing lists of books needed for a library and several fold-out charts (fig. 35) suggesting alternatives for the arrangement of a collection. Limiers described several types of libraries, but of primary importance in each were the language reference works: glossaries, grammars, etymologies, and dictionaries. For Limiers, these works served as the key to the rest of the collection since proper terminology and classification were fundamental to a library's organization. (Collison 1964)



Fig. 36 *Historia naturale*

56. Ferrante Imperato (1550-1625)

*Historia naturale*

Venice: Combi & La Noù, 1672

Purchased from a fund given in honor of  
Herman H. Fussler by Bernard Weinberg

In 1597 the Neapolitan pharmacist and natural scientist Ferrante Imperato wrote, “my theatre of Nature consists of nothing but natural things, such as minerals, animals and plants.” Imperato and his son Francesco published a catalogue in 1599 and a second edition (1672) in expanded

and revised form. Imperato’s collection was one of the first comprehensive scientific museums in Italy, influencing many later collections such as that of Ole Worm (cat. 57). His use of the word “theatre” to describe the collection reveals his motives in forming it: to recreate the natural world in order to better understand its structure and operation.

The fold-out illustration (fig. 36) depicts Imperato and his son with two visitors. (Balsiger, Bedini, Grinke, Olmi)

57. Ole Worm (1588-1654)

*Museum Wormianum*. . . .

Amsterdam: Louis & Daniel Elzevier, 1655

The John Crerar Collection of Rare Books in the  
History of Science and Medicine

Renowned Danish doctor and natural scientist Ole Worm formed his collection for the benefit of others. Besides his achievements as a scientist, Worm was a pioneer of prehistoric Nordic archeology and his collection contained many valuable Scandinavian artifacts. In 1642 Worm erected an anatomy theater adjacent to his museum where he performed autopsies for his students, providing yet another format for the close observation of nature.

Using traditional means of classification, Worm divided his collection between “natural” and “artificial” objects, deliberately excluding as unscientific any objects related to alchemy or of solely aesthetic interest. The catalogue of his collections, besides being a summary of contemporary scientific practices, emphasized the utility of the objects. In the natural history section, for instance, Worm described the medicinal use of some specimens. (Balsiger, Grinke, Schepelern)

58. Lorenze Legati

*Museo Cospiano*. . . .

Bologna: Giacomo Monti, 1677

Morris Fishbein Collection

The *Museo Cospiano* represented the union of two of the most important collections in seventeenth-century Bologna, those of Ulisse Aldrovandi and Ferdinando Cospi. Aldrovandi was a physician, professor of natural history and philosophy at the University of Bologna, and director of the city’s famed botanical gardens. In his collection he sought to describe and illustrate all of external nature. Upon Aldrovandi’s death, Cospi, an affluent Bolognese

W O R M I A N U M .



Fig. 37 *Museum Wormianum*. . . .

senator, bought the collection to augment his own—a collection of ethnographic artifacts and mechanical instruments. Later he donated the museum to the Bolognese Senate, making it accessible to the public. Although the *Museo Cospiano* consciously sought to establish itself as a serious scientific institution in contrast to other more eclectic private collections or to the *Wunderkammer* of the Northern tradition, it too had elements of the rare and bizarre, including such items as Dante’s chess board, a

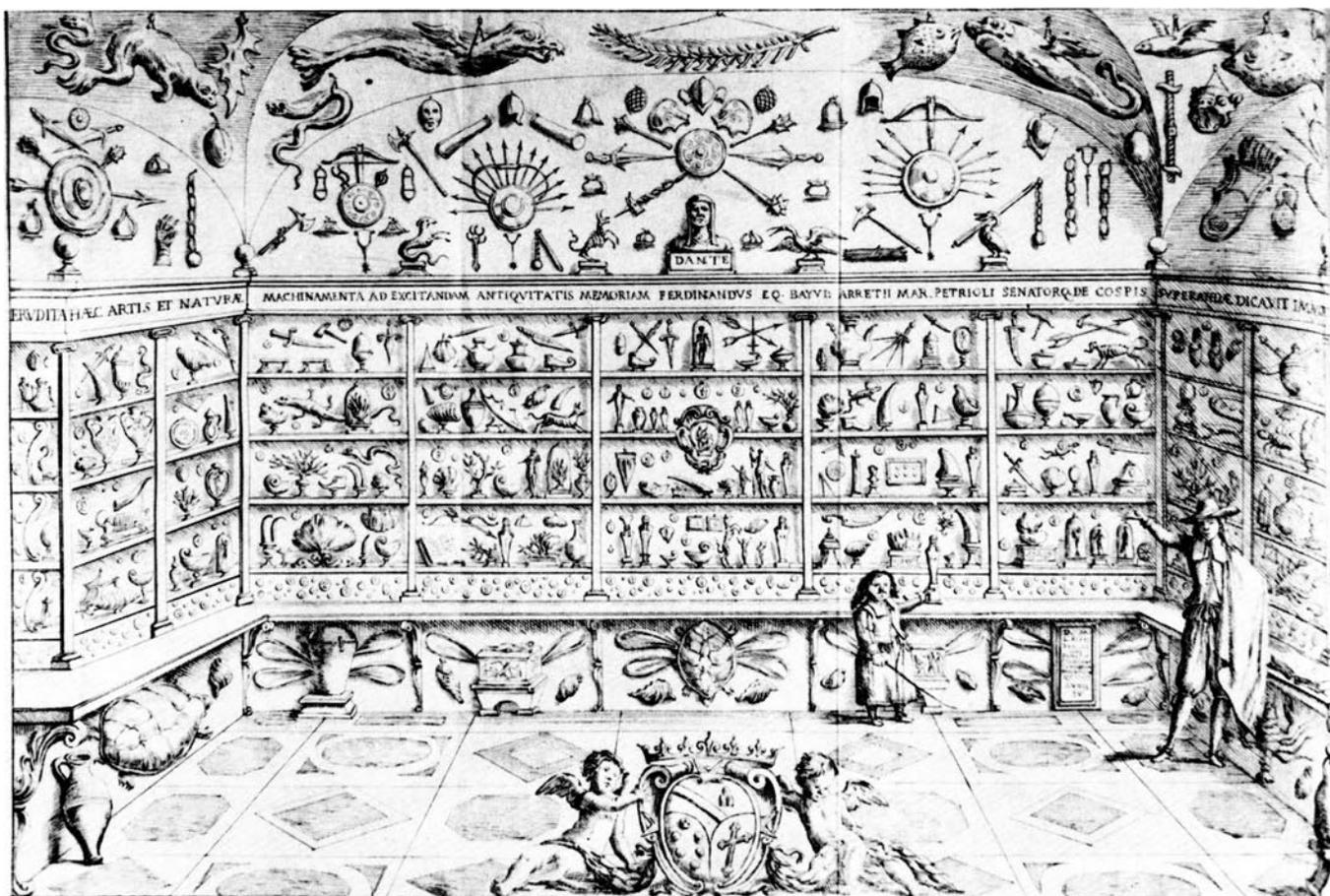


Fig. 38 Museo Cospiano. . . .

Russian whip, a book in Chinese characters, Indian asbestos, and sealskin clothes from Greenland. (Balsiger, Bedini, Grinke, Laurencich-Minelli, Olmi)

59. Claude Du Molinet (1620-1687)

*Le Cabinet de la Bibliothèque de Sainte Geneviève. . . .*

Paris: Antonine Dezallier, 1692

Helen and Ruth Regenstein Collection

The cabinet of the Bibliothèque Sainte Geneviève in Paris was formed by Father Claude Du Molinet as an annex to the library. Like a laboratory, the collections of coins, medals, optical instruments, vessels, ancient garments, and paintings and drawings were resources that could

supplement the information in the books. Du Molinet stressed the practical function of the collection: it should be “useful to the sciences, to mathematics, to astronomy, to optics, to geometry, and especially to history, whether it be natural, ancient, or modern. . .” thus distinguishing it from many other cabinets of the day that contained curiosities and wonders for their own sake. Du Molinet deliberately omitted outrageously eccentric objects or gratuitous items for sheer pomp and display; the cabinet of Sainte Geneviève was to be a place for serious study.

Accompanying Du Molinet’s catalogue were beautiful engravings by Franz Ertinger, some of which show the interior of the library (fig. 39). Today, the Louvre in Paris houses a large part of this collection. (Balsiger, Grinke, Schupback)

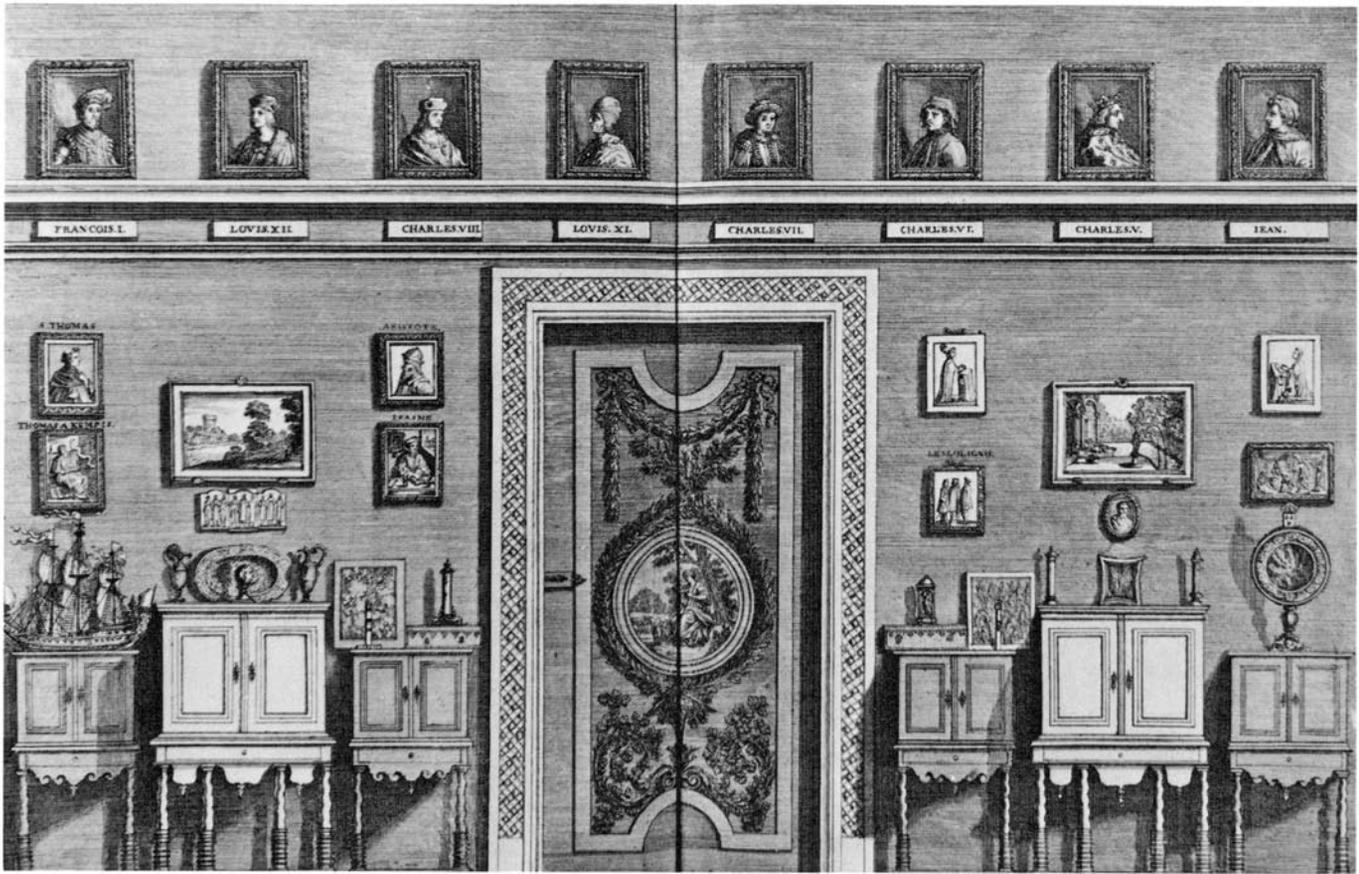


Fig. 39 *Le Cabinet de la Bibliothèque de Sainte Geneviève. . . .*

60. Jacob de Wilde (1645-1725?)  
*Signa antiqua e museo Jacobi de Wilde. . . .*  
 Amsterdam: The author's heirs, 1700  
 Berlin Collection

The *Signa antiqua* of Jacob de Wilde catalogues a private collection and differs significantly from inventories of institutional collections. De Wilde took no pains to discuss methods of classification or to argue for specific utility of the collection. The catalogue is a pure and simple celebration of his collection of Egyptian and Roman antiquities, coins, gems, bronzes, and surveying instruments. The text consists of panegyrics praising both de Wilde's collection and the accompanying engravings by his daughter Maria. The fold-out plate (fig. 40) shows De Wilde in the museum entertaining a guest. (Grinke)

61. Filippo Buonanni (1638-1725)  
*Musaeum Kircherianum. . . .*  
 Rome: Giorgio Placho, 1709  
 Purchase of the Library's General Book Fund

The prodigious polymath Athanasius Kircher directed the research museum at the Jesuit College in Rome. Many of Kircher's publications, like his treatises on microscopy and on the vibrations of musical instruments, resulted from his work on the collection. The museum also included a large number of astronomical instruments, obelisk models, hydraulic organs, automatio, preserved animals, ancient coins, jewelry and clothing (fig. 41), as well as paintings and drawings, and ethnographic items collected by Jesuit missionaries in the New World and China.

Like the collection formed by Du Molinet at Sainte

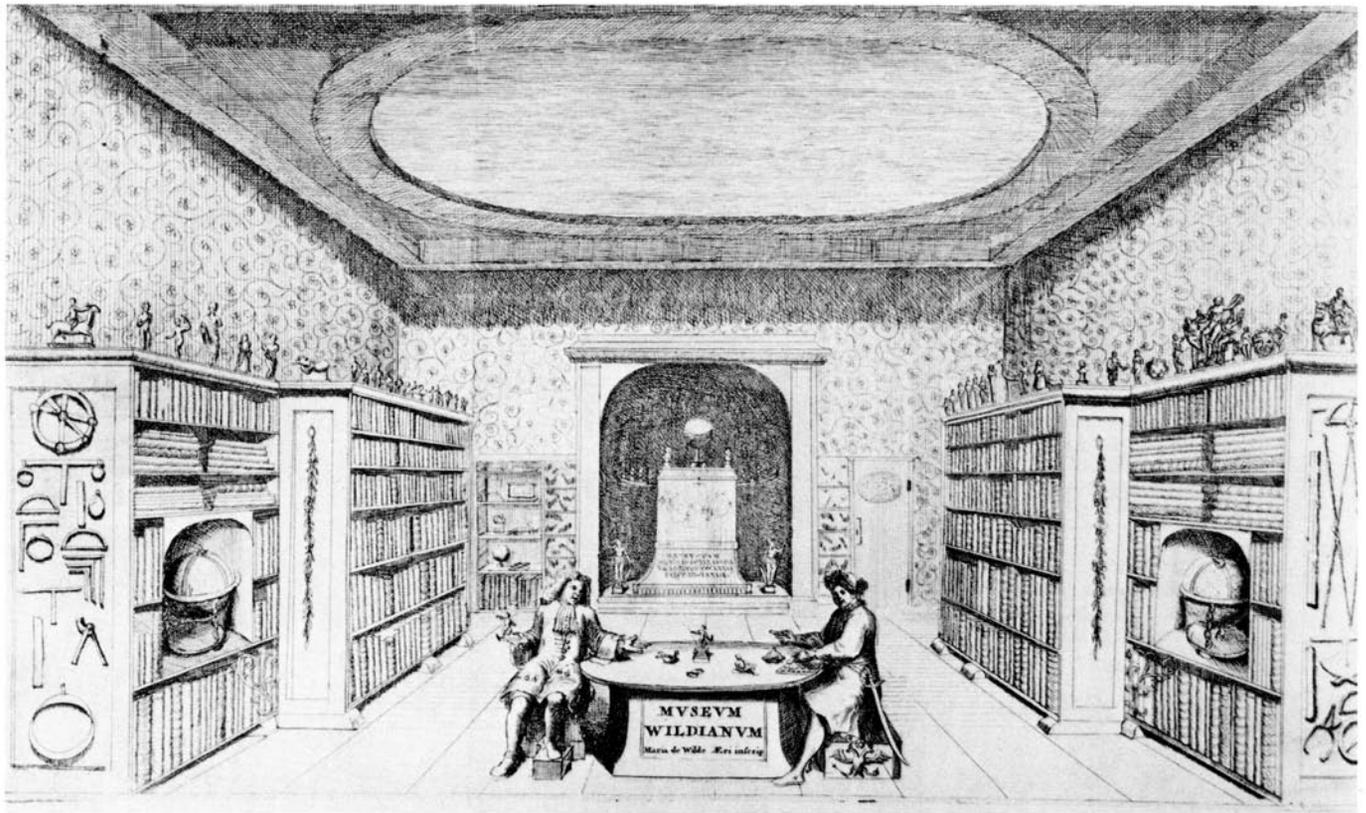


Fig. 40 *Signa antiqua e museo Jacobi de Wilde. . .*

Geneviève (cat. 59), Kircher's museum emphasized utility, but the two collections differed fundamentally in their display. Whereas Du Molinet's collection reflected a Gallican restraint and a clear sense of order, the Jesuit museum was a dramatic theater of learning with painted ceilings depicting the signs of the zodiac. A crocodile hung suspended in the middle of the main room and a human skeleton greeted visitors at the entrance.

After Kircher's death, the museum was turned over to Filippo Buonanni, author of this catalogue and a noted conchologist who added his own fine collection of mollusks to the museum. Later in the eighteenth century, the museum fell into disrepair and was eventually dispersed. (Balsiger, Bedini, Grinke, Schupback)

62. Michael Bernhard Valentini (1657-1729)

*Museum museorum. . .*

2 vols. Frankfurt am Main: Heirs of  
Johann David Zunner and Johann Adam Jung, 1714  
The John Crerar Collection of Rare Books in the  
History of Science and Medicine

Michael Bernard Valentini was a doctor of medicine renowned for his work in comparative anatomy; he was personal physician to the Margrave of Hesse and professor of experimental science and medicine at Giessen. His *Museum museorum* was more than a catalogue of his own collection. In it he compiled a list of all museums known to him with select inventories of some of the greatest collections in Europe, including: the Royal Museum at Vienna, the Treasury at St. Denis, the Anatomy Cabinet at St. Victoire, the relics in the Liebfrauen Kirche at Aachen,

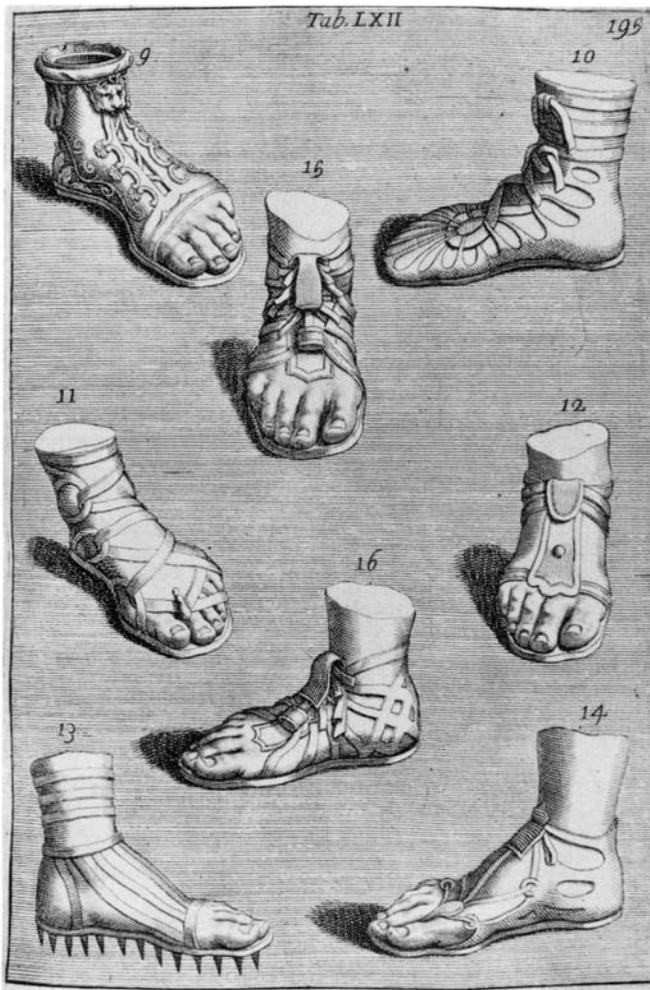


Fig. 41 *Musaeum Kircherianum*. . . .

the Royal Society, the Anatomy Theatres at Leyden and Amsterdam, Apothecary Petiver's cabinet, J.D. Major's *Kunstkammer*, and the fossil collection of J.G. Kisner in Frankfurt. Valentini's list indicates the topical range of museums at the beginning of the eighteenth century and the variety of collectors from monarch to private individual, from university to scientific academy or religious order. The title page from Valentini's work (fig. 42) features objects from natural history. (Balsiger, Grinke)



Fig. 42 *Museum museorum*. . . .

63. John and Andrew van Rymsdyk (fl. 1767-1770)  
*Museum Britannicum*. . . .  
 2nd edition. London: Printed for  
 [P. Boyle] by J. Moore  
 Purchase of the  
 Library's General Book Fund

The *Museum Britannicum* is a description of the British Museum's collection of antiquities and natural curiosities, illustrated by John and Andrew van Rymsdyk. The introduction by John van Rymsdyk is bombastic, comparing the

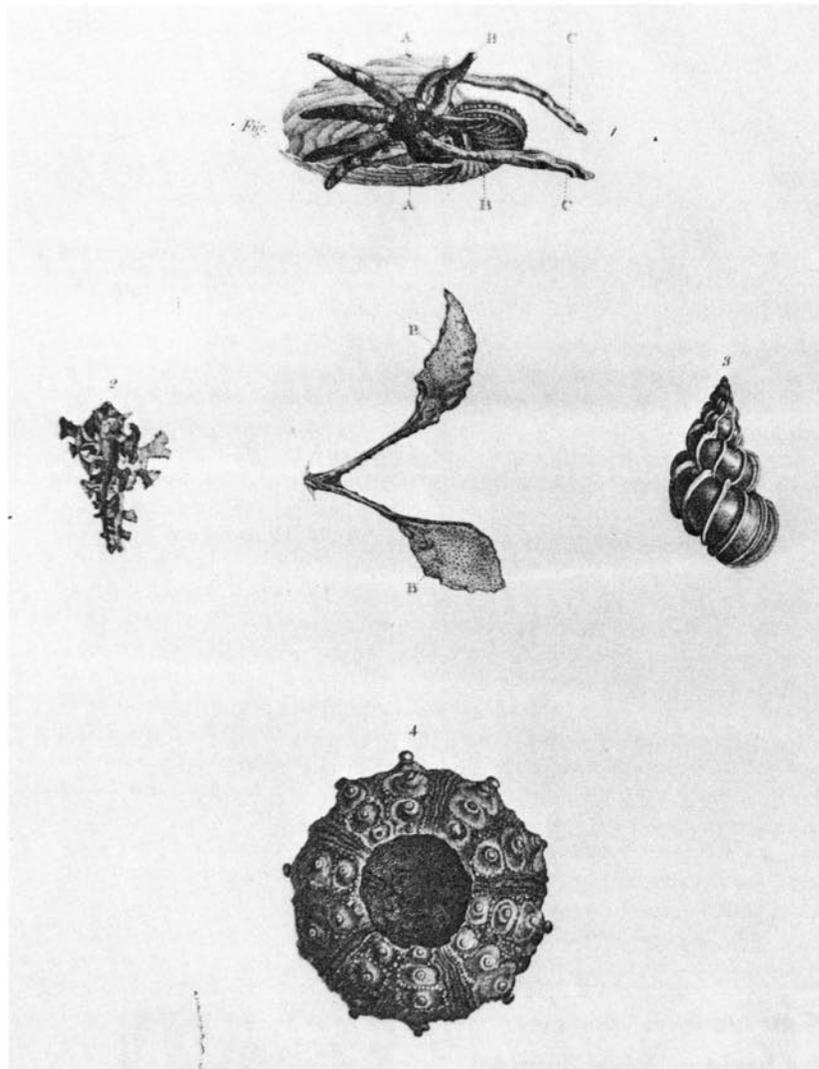


Fig. 43 *Museum Britannicum*. . . .

museum's objects to "Last Wills [and] Testaments [which] become a Representative Assembly of all the Classes and Families of the World." He describes the museum as a monument to the collective efforts that had formed it, as well as a repository to give the collection permanence. It was this concern for a kind of immortality that spurred many private collectors to donate their treasures to public institutions like the British Museum.

The choice of objects in the catalogue reflects a taste for the rare and unusual, qualities usually associated with private collections rather than public institutions.

Collections in public museums were traditionally expected to be more didactic and therefore less titillating than private collections. In this case, however, a group of affluent subscribers underwrote the illustrated catalogue, which exploited the picturesque qualities of the bizarre in order to create greater appeal. Among the unusual objects were Roman ensigns and rings, bird's eggs, a brick from the Tower of Babel, bezoars and figured stones, American hummingbirds, unusual shells and crustaceans (fig. 43), a pair of gloves fashioned from the beard of the *pinna marina* shell, and so forth. (Grinke, Hunter)

# 9 ENCYCLOPEDIA NARRATIVES

Many other literary forms share the ambitious scope of the encyclopedia. The goal of crystallizing a totality of knowledge in one work, of searching for truth and finding its proper expression, is reflected in works like Cervante's *Don Quixote*, Dante's *Divine Comedy*, the *Roman de la rose*, and Goethe's *Faust*. Each of these narratives, whether written in a secular or religious milieu, embodied a panoply of experience. Each featured a character who represented humanity at its most essential task: the experience and the expression of knowledge. In these books, the encyclopedic impulse became dynamic, acted out spatially and temporally in the characters' travels and experiences. In the *Roman de la rose* (cat. 64), this movement was allegorical as the central character traversed the garden, encountering Virtues and Vices along the way; Cervantes (cat. 66) presented the journey satirically through the pseudo-chivalric adventures of Don Quixote and his companion Sancho Panza.

The encyclopedic narrative also has the quality of an encyclopedia of literature, a hybrid of poetry and prose, epic and romance, *Bildungsroman* and psychomachia. In this respect, the encyclopedic narrative is a very self-conscious genre, not only synthesizing literary genres but celebrating the native language and creating a model for later authors. Dante, for example, wrote in the vernacular Italian rather than Latin, and Goethe was among the first to forge a rich literary expression in German after years of Latin and French dominance in philosophy and literature. Goethe also employed numerous literary forms ranging from the lyric and the epic to the dramatic and the operatic. The *Roman de la rose* spawned a renewed interest in the "allegorical-dream" genre (psychomachia), influencing innumerable works that appeared in the following decades. Cervantes's work came to represent a monument to Spain's cultural "Golden Years." Moreover, in *Don Quixote* he produced an archetypal figure who, like Goethe's *Faust*, continues to capture the imagination of reader and writer alike. (Howe 1985a, Mendelson, Swigger)

64. *The Romaunt of the Rose. Rendered out of the French into English by Geoffrey Chaucer*  
London: Chatto and Windus for the Florence Press,  
1908. Anonymous Gift

The *Roman de la rose* is an Old French allegorical poem written in twenty-two thousand lines. Guillaume de Lorris wrote the first part between 1225 and 1230, and Jean de Meun began the second and larger of the two around 1270.

As the narration opens, a young man dreams of a rose enclosed in a garden. This rose becomes the symbol of the woman he desires, and the plot revolves around his quest to possess her. In his undertaking he meets with obstacles personified as virtues and vices such as nature and delight, jealousy and danger.

By setting the story within a dream, the author places the reader within a world of essences rather than particulars,



Fig. 44 *The Romaunt of the Rose. Rendered out of the French into English by Geoffrey Chaucer*

making the quest abstract and more universal. The use of allegory or personifications offers examples of courtly conduct. The virtues and vices are, in a sense, an encyclopedia of the passions, each virtue and vice being a thematic heading and their speeches functioning as definitions. De Meun's clever pairing of opposites such as orthodoxy and heresy furnished an inventory of human conduct, for as the narrator explains, "If one wants to define one of the pair, he must remember the other, or he will never, by any intention, assign a definition to it."

This 1908 British edition features Chaucer's unfinished English translation and illustrations by Norman Wilkinson (cat. 44) and Keith Henderson. (Hult, Lawler)

65. Dante Alighieri (1265-1321)  
*La Comedia di Dante Aligieri con  
la nova espositione di Alessandro Vellutello*  
Venice: Francesco Marcolini, 1544  
Acquired by exchange

Dante's *Divine Comedy* consists of one hundred cantos set in the first person. His journey through hell, purgatory, and paradise affords a comprehensive view of human destiny, both temporal and eternal. Dante's guides along the way are the ancient poet Vergil; Beatrice, subject of Dante's earlier poems and his muse; and twelfth-century theologian and mystic Bernard of Clairvaux. As in the *Roman de la rose* (cat. 64), characters are symbolic examples, but Dante cast his drama in a Christian setting, often including real historical personages such as Brutus or Judas.

In many respects this encyclopedic narrative was a defense of Christianity, of vernacular language, and of poetry itself. Dante composed the *Divine Comedy* during a time when theologians were questioning the validity of poetry. Dante's eloquent opus not only demonstrated its cognitive worth but its power of persuasion. With Dante, the vernacular tongue achieved literary status equal to that of classical language. Indeed, according to Christian criteria



Fig. 45 *La Comedia di Dante Aligieri con la nova esposizione di Alessandro Vellutello*

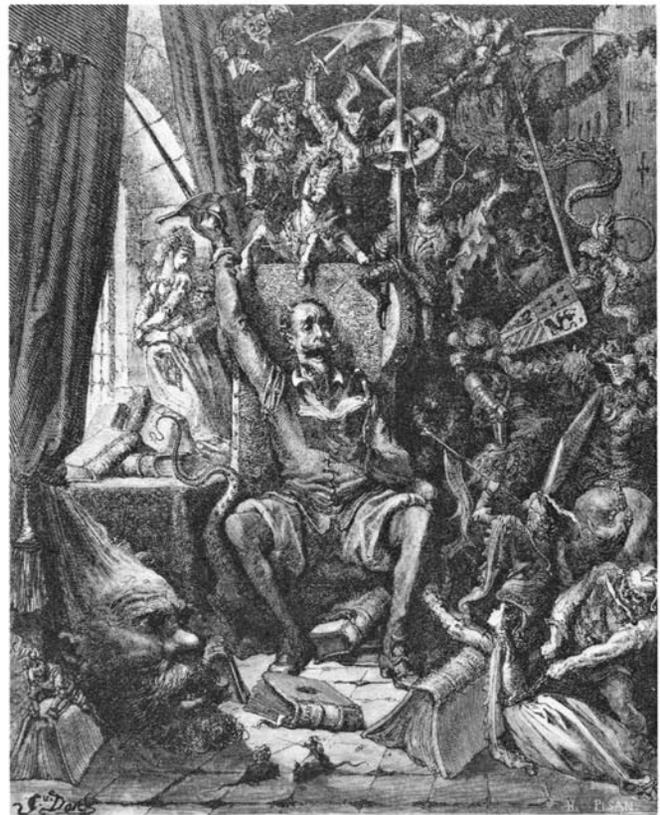


Fig. 46 *The History of Don Quixote*

the vernacular was even superior because it was more natural and humble than the lofty and learned classical tongue. (Mendelson)

66. Miguel de Cervantes Saavedra (1547-1616)  
*The History of Don Quixote*  
 Edited by J.W. Clark. London and  
 New York: Cassell, Petter, and Galpin, [18—]  
 Gift of Mrs. G.T. Longhorn in memory of  
 Edward Carson Waller

*Don Quixote de la Mancha*, written in the early seventeenth century by Miguel de Cervantes Saavedra, was an encyclopedic tragi-comedy that satirized the popular chivalric romances of its day.

Dressed in antiquated knight's armor, Don Quixote sets

out with his companion-servant Sancho Panza in search of chivalric adventure. As the narration unfolds, mishap after mishap occurs and the pseudo-hero is gradually stripped of his naive optimism. Underneath this bitter parody lie profound observations on human nature, often mixed with realistic portrayals of manners and mores. Cervantes couched many of these powerful insights in a series of digressive dialogues between master and servant outside the book's main narrative.

This self-consciously encyclopedic tale parodies not only the pseudo-chivalric romance but its own narrative as well. The quest to learn, although enriching, has its limitations. The story of Don Quixote is all the more tragic because at his death he recognizes this fact, his naive optimism vanquished.

This edition combines the English translation of Charles Jarvis (1657?-1739) with illustrations by the prodigious nineteenth-century artist Gustave Doré (fig. 46). (Mendelson)



Fig. 47 *Faust*

67. Johann Wolfgang von Goethe (1749-1832);  
*Faust*

Munich: Theodor Strofer's Kunstverlag, [1881]  
Purchase of the Library's General Book Fund

The Faust legend, which dates to the sixteenth century, tells the story of a scholar-sorcerer who sold his soul to the devil to gain greater knowledge. In the late eighteenth century

Johann Wolfgang von Goethe became fascinated with this legend. In his version Faust not only yearns for more knowledge but wishes to experience it and surrenders his soul to the devil, Mephistopheles, in exchange for a new life. Faust's unbridled search for truth is tempered by his love for Gretchen, who saves him at the end of the drama.

Goethe's Faust is no longer a particular individual but a representative of all humanity, and his anguished search for truth is the modern allegory of the encyclopedic impulse, fraught with uncertainty in the political and cultural climate of post-revolutionary Europe. The uncertain course from traditional to modern values becomes evident in Goethe's mediation of religious sentiment and secular values, the freedom of the individual and the needs of society. He attempted a synthesis of the classical and German heritages, represented symbolically in Faust's union with Helen of Troy. This nineteenth-century edition (fig. 47) features illustrations by Alexander Liezen Mayer. (Mendelson)

68. Johann Wolfgang von Goethe (1749-1832)  
*Schriften*

8 vols. Leipzig: Georg Joachim Göschen, 1787-1790  
Emil G. Hersch-Bernays Library  
Gift of Julius Rosenwald

Goethe's *Faust* exists in several different versions. The earliest to appear in print, the so-called *Faustfragment*, is in volume seven of the first authorized edition of his works. Produced under Goethe's supervision, this edition contains illustrations by Daniel Nikolaus Chodowiecki.

# 10<sup>THE</sup> CRITIQUE OF ENCYCLOPEDIISM

Encyclopedism has found detractors in every age, but perhaps the most biting critiques were those directed at the Renaissance humanists. Humanism aimed at a kind of encyclopedism that would prepare a scholar to produce and interpret literary texts in Latin. This task became more difficult as learning grew, reducing many encyclopedias to lexical exercises that offered, as critics noted, little but names and terminology. Others faulted humanist undertakings for being too arcane or too rooted in the past. One early eighteenth-century critic, Johann Burkhard Mencke, in his book *De charlataneria eruditorum* (The Charlatanry of the Learned) (cat. 69), dismissed many of these encyclopedic compendia with a quote from Catullus: “Annales Volusi, cacata charta!” (annals of Volusus, what worthless paper!)

In the second half of the eighteenth century, especially in France, the production of encyclopedias, dictionaries, and reference works reached such volume that literary critic Friedrich Melchior von Grimm called the phenomenon a “furor.” Encyclopedias of every sort began to appear: the *Encyclopédie médicale*, *Encyclopédie militaire*, *Encyclopédie littéraire*, and *Encyclopédie des dieux et des héros* are but a few examples. This profusion of specialized encyclopedias not only eroded the notion of “unified knowledge” but introduced an element of relativism, with some books being encyclopedic only in title. The *Enciclopedia perruquière* (fig. 70) parodied this encyclopedic mania; if there could be an encyclopedia of the military, why not an encyclopedia of wigs?

Many critics attacked the commercialization and trivialization of encyclopedias, others questioned the very notion. As early as Cervantes’s *Don Quixote*, which satirized the naive desire to know, there was a latent criticism of encyclopedism. In *Gulliver’s Travels* (cat. 73), Jonathan Swift sharply ridiculed arbitrary systems of knowledge erected on false conceptions and motivated by power and deceit.

Gustave Flaubert’s unfinished novel *Bouvard et Pécuchet* (fig. 76) attacked the idea that an encyclopedia or dictionary contained nothing but objective facts. Flaubert asserted that they are, in fact, arbitrary and subjective. His *Dictionnaire des idées reçues* (Dictionary of received ideas), which was to be the second half of the novel, devalued the act of knowing to rote arbitrary copying. This parodic dictionary offered epigrammatic and categorical definitions for the bourgeois seeking standard explanation for every word: *Chateaubriand*: especially known for the steak that is named after him. . . . *Humidity*: The cause for all illness. . . . *Nature*: ‘How beautiful nature is!’ To be said each time one is out in the country.

Jorge Luis Borges’s short story “Library of Babel” in his *Ficciones* (cat. 77) emphasized the artificiality of the encyclopedia. Employing an architectural metaphor, Borges brings the ironic dilemma of the encyclopedia to the forefront: either it is all-encompassing and infinite (and thus beyond human reach); or it is a meaningless gathering of disconnected facts.

Modern readers no longer presume that encyclopedias include information in all fields, nor do we expect them to present a method to interpret knowledge. Rather, our relationship is detached: we simply consult the encyclopedia for isolated facts. Yet we should recognize, as did Flaubert, that there is no such thing as “impartial” information. We should demand more from encyclopedias than information; we should know whence the information derives and its implications. As Theodore Zeldin has astutely observed, “What people want today, even more than information, is the ability to choose between information; modernity means unending choice, unending crisis.” (Darnton, Grafton, Rétat, Zeldin)

69. Johann Burkhard Mencke (1674-1732)  
*De charlataneria eruditorum declamationes duae. . . .*

Fifth edition. Amsterdam:

Ulrich Christian Saalbach, 1747

Purchase of the Library's General Book Fund

Johann Burkhard Mencke shared many qualities with the humanist scholars he satirized so trenchantly. He was a man with knowledge in many fields—history, poetry, law, and theology—and he was well-versed in many



Fig. 48 *De charlataneria eruditorum declamationes duae. . . .*

languages—English, French, Italian, Latin, and German. He was a poet, natural scientist, editor, professor, and renowned orator. But his humanist education had exposed him to the pedantry that he criticized in *De charlataneria eruditorum* (The Charlatantry of the Learned) which first appeared in 1715.

It was not the pursuit of learning that Mencke criticized but the bombastic claims that some scholars put forth in their works.

The bookshops are full of thesauruses of Latin antiquities which, when examined, turned out to be far less treasures than fuel for the fire. And alongside them are many Kernels of Philosophy and the other sciences—mortar without lime. . . . I shall not speak at length of the vast number of Golden Keys, Royal Methods, Graduses ad Parnassum, Oceanic Macro-Micro-Cosmicos, Shields of Truth, Bulwarks of Science, Inventories of the Mind and other such grandiose works that are out to ensnare buyers.

Mencke compared the false and pedantic pretense in these works to the fantastic claims of quacks and charlatans who attracted large crowds. The frontispiece (fig. 48) captures this image with magicians performing on a stage before an audience. Above this scene is inscribed “Muntus fuld tezibi,” deliberately altering the Latin phrase “Mundus vult decipi” (the world wants to be deceived) to resemble a German accent. (Grafton)

70. [Jean Henri Marchand (d. ca. 1785)]

*L'Enciclopédie perruquière. Ouvrage curieux a l'usage de toutes sortes de têtes*

Amsterdam and Paris: Chez l'auteur et chez Hochereau, 1757

Purchase of the Library's General Book Fund

Jean Henri Marchand, a Parisian lawyer and royal censor, wrote the *Enciclopédie perruquière* (Encyclopedia of Wigs) under the pseudonym “Monsieur Beaumont.”

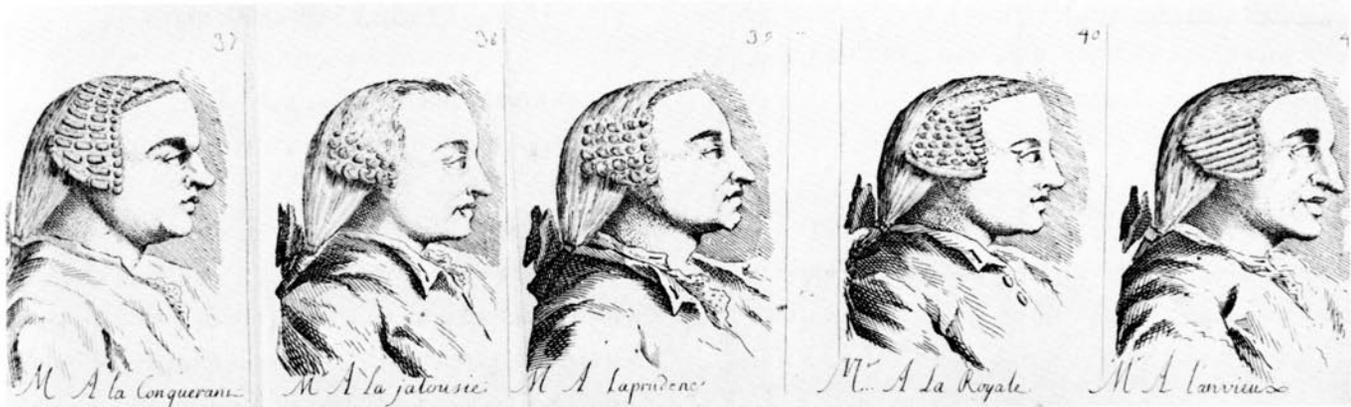


Fig. 49 *L'Encyclopédie perruquière*. Ouvrage curieux à l'usage de toutes sortes de têtes

Unhindered by his serious occupations, Marchand also wrote “Les Panaches, ou les Coiffures à la mode” (1778), a one-act comedy about hair styles.

The *Encyclopédie perruquière* can be seen as a parody of specialized encyclopedias. Throughout the work, a mock serious tone prevails with statements like “The union of praxis with theory is the way to marry the practical with the honorable,” which, when applied to wigs, is completely absurd.

The numerous illustrations (forty-five in all) also ridiculed the vogue for pseudo-scientific reference works. In Linnaean fashion, the author classified the wig kingdom. The corresponding headings such as “Jealousy” or “Prudence” (fig. 49) imitated the then-popular physiognomic theory which assigned character traits on the basis of physical appearance.

71. *Encyclopédiana, ou l'abeille de Montmartre: Recueil curieux, instructif, moral, religieux et philosophique*

Paris: Marchand, 1801. Purchase of the Library's General Book Fund

The suffix “-ana” refers to a genre that unites in one work curious facts and anecdotes about a particular person or topic. This *Encyclopédiana* was, then, an encyclopedia of

witticisms, jokes, proverbs, and anecdotes. It borrowed its title from a work of Charles Joseph Panckoucke, an *Encyclopédiana* of 1791. As second publisher of the *Encyclopédie* and creator of the *Encyclopédie méthodique* (cat. 50), Panckoucke built his career on the encyclopedia vogue. After he had planned the “encyclopedization” of almost every discipline, Panckoucke created the *Encyclopédiana* which completely vulgarized the genre and took parasitic advantage of the vogue for encyclopedias. Unlike Panckoucke, the editor of the 1801 *Encyclopédiana*

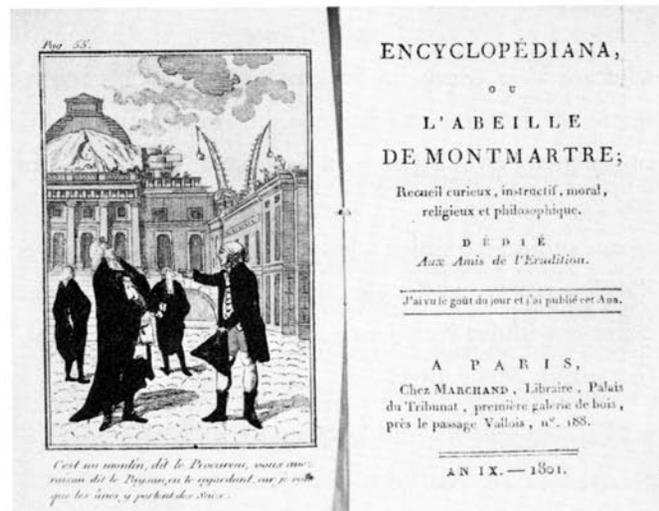


Fig. 50 *Encyclopédiana, ou l'abeille de Montmartre: Recueil curieux, instructif, moral, religieux et philosophique*

admitted to its questionable status, ironically stating on the title page “I saw the taste of the day, and I published this Ana.” (Darnton, Saisselin)

72. François Rabelais (ca. 1490-1553?)

*Les Oeuvres. . . contenant cinq livres, de la vie, faicts, & dits heroïques de Gargantua, & de son Fils Pantagruel. . . .*

Lyon: Jean Martin, 1558 [i.e., 160-] Purchase of the Library’s General Book Fund

François Rabelais wrote the five books of *Pantagruel and Gargantua* between 1532 and 1552 (the fifth book is thought to be an anonymous compilation of Rabelais’s notes). Like the characters of other encyclopedic narratives, Pantagruel and Gargantua are on a lifetime quest for knowledge, but this quest is parodied in the manner of a burlesque adventure novel.

Rabelais’s milieu was humanist Paris, where learning often became an end in itself, compiling great quantities of information in works of esoteric miscellany. Rabelais epitomized this aimless search for knowledge in a list which Pantagruel compiled from the holdings of the library in St. Victoire in Paris. Among the titles were: “The Gentle Art of Farting in Company” by Hardouin de Grätz, “The Codpiece of the Law,” and “Concerning the Serving of Mustard after Meals, in Fourteen Books by his learned master de Rusticockpiddles Shankcrapwallopper, with a commentary by Vorilonge, a Franciscan critic of Scotus and Peter Lombard. . . .” These absurd titles ridiculed the arcane subjects to which scholars had dedicate themselves. Rabelais’s fictional list also demonstrated his belief that “science without conscience is but the ruin of the soul.” (Jeanneret, Mendelson)

73. Jonathan Swift (1667-1745)

*Works*

4 vols. Dublin: George Faulkner, 1735  
Helen and Ruth Regenstein Collection

In 1726 Jonathan Swift published his work *Travels into Several Remote Nations of the World. . . by Lemuel Gulliver*, better known today as *Gulliver’s Travels*. Swift employed the travel-adventure genre to create a mock encyclopedic narrative criticizing the society of his own day. Gulliver travelled to fictional countries whose faults and idiosyncrasies Swift exaggerated in order to create striking parallels with European society.

In book III, Gulliver visits “Laputa” a floating island occupied by speculative thinkers. Like their detached country floating in the sky, Laputans are completely removed from reality, pursuing knowledge by creating abstract and arcane theories without considering their consequences. In one episode a professor at the academy is at work on a “Project for improving speculative Knowledge by practical and mechanical Operations.” A contraption for this task enables “the most ignorant Person at a reasonable Charge, and with little bodily Labour, . . . [to] write Books in Philosophy, Poetry, Politicks, Law, and Mathematics and Theology.” This is a telling image of blind application of knowledge.

74. Jonathan Swift (1667-1745)

*Voyages de Gulliver dans des contrées lointaines*

2 vols. Paris: H. Fournier Ainé, Furne et Cie, 1838  
Helen and Ruth Regenstein Collection

Swift also found admirers across the Channel. Voltaire championed *Gulliver’s Travels* and the Abbé Desfontaines undertook a French translation. The 1838 edition of this translation appeared with J.J. Grandville’s trenchant illustrations (fig. 51).

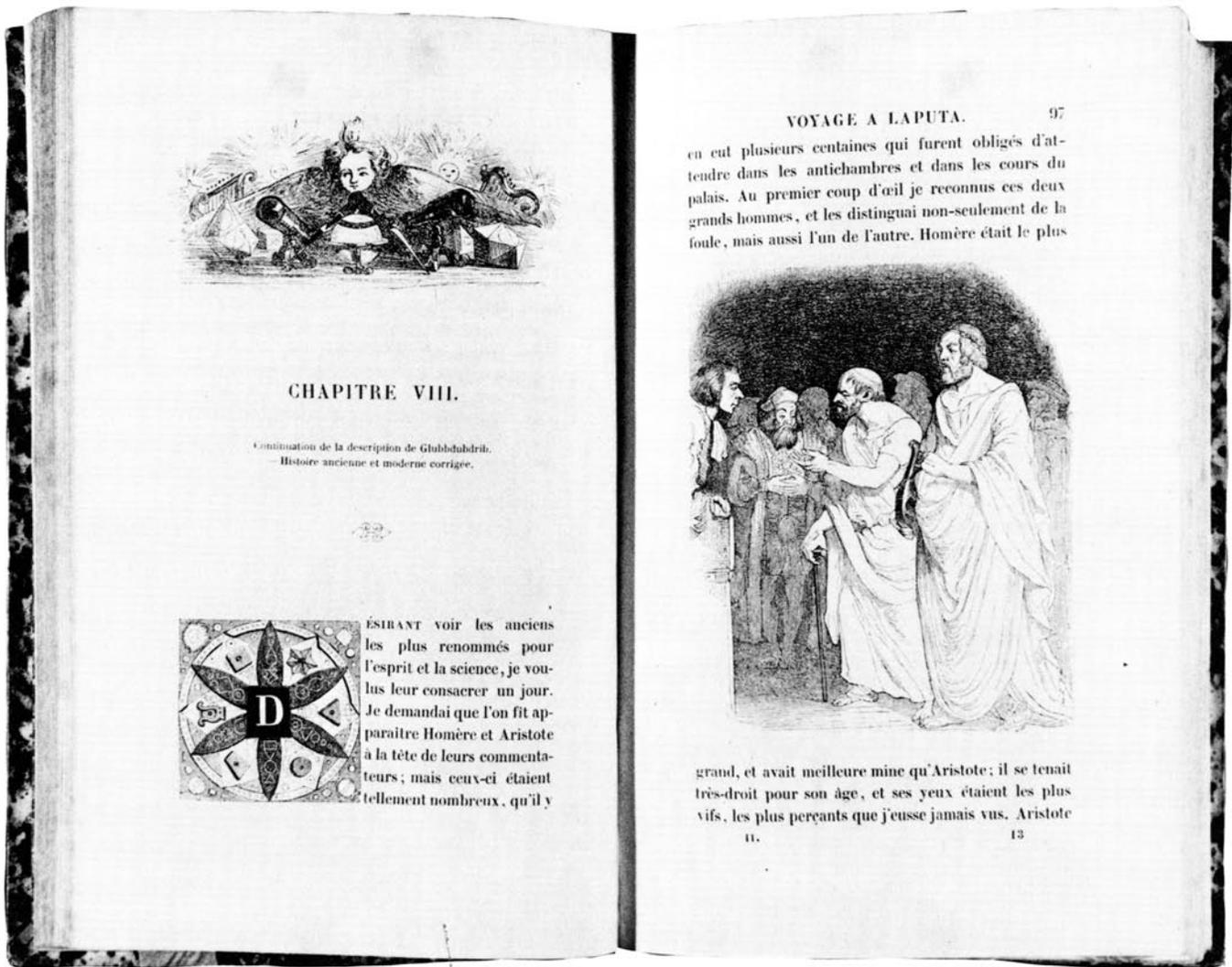


Fig. 51 *Voyages de Gulliver dans des contrées lointaines*

75. Laurence Sterne (1713-1768)

*The Life and Opinions of Tristram Shandy, Gentleman*  
2nd edition. 9 vols in 5. London: R. and J. Dodsley, T. Becket and P.A. Dehondt, 1760-1767. Purchase of the Library's General Book Fund

Laurence Sterne first published his work *Tristram Shandy* in 1759. Like Rabelais's *Gargantua and Pantagruel* (cat. 72), Sterne's novel concerns the upbringing and experiences of a character whose life is filled with bizarre adventures and eccentric episodes. Sterne portrayed Tristram Shandy's

ill-fated childhood with sympathetic humor directed not only at eighteenth-century English society but at all human foibles.

In Chapter XVI Tristram Shandy's father proposed creating of a "TRISTRA-paedia" or a "system of education." The futility of this project soon became evident as the quantity of material grew insurmountable and the idea of systematizing degenerated into the assemblage of arbitrary facts. Sterne injected irony into this scene in which the father was so preoccupied with composing his magnum opus that he completely neglected his son's basic needs.

GUSTAVE FLAUBERT.



H.S. NICHOLS PUBLISHER  
LONDON

1896

Fig. 52. *Bouvard and Pécucnes*

76. Gustave Flaubert (1821-1880)

*Bouvard and Pécuchet*

Translated by D.F. Hannigan. London: H.S. Nichols, 1896. Purchase of the Library's General Book Fund

*Bouvard et Pécuchet* was the title of Gustave Flaubert's novel left unfinished at his death in 1880. The second half of the work was to incorporate Flaubert's *Dictionnaire des idées reçues* (Dictionary of received ideas). Together these works formed a scathing critique of encyclopedism.

The main characters were two copy clerks who retired to the country to dedicate themselves to the attainment of knowledge. The exuberant optimism with which they explored agriculture, history, literature, politics, philosophy, and religion inevitably met only with disaster and failure. With the collapse of all their hopes, the pursuit of knowledge was finally reduced to rote copying of reference works.

Flaubert's work pointed to the artificiality and arbitrariness of the encyclopedic quest. Bouvard and Pécuchet discovered that even the "best authorities" are incorrect or conflict with one another, and that there is thus no infallible system or reliable answer. Flaubert also questioned the intrinsic value of the encyclopedic enterprise. What end does the attainment of knowledge serve? (Bersani, *Le Siècle des dictionnaires*, Swigger)

77. Jorge Luis Borges (1899-1986)

*Ficciones*

[New York]: The Limited Editions Club, 1984

Gift of Lester K. Olin

In 1932 the Argentine writer Jorge Luis Borges wrote a short essay in defense of Flaubert's *Bouvard and Pécuchet* (cat. 76). In his own work, however, Borges was not as scathingly critical of the encyclopedic endeavor as Flaubert.

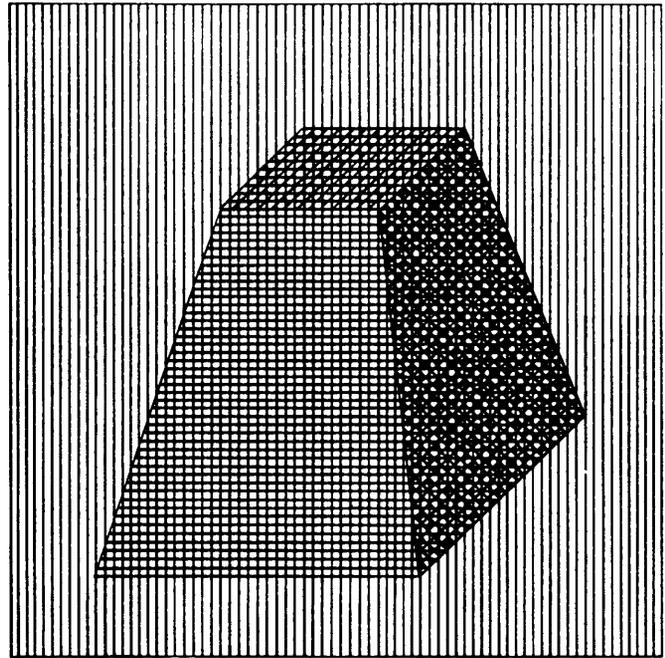


Fig. 53 *Ficciones*

For Borges the encyclopedia became a fiction, a formal structure whose rigor, he wrote, "is a rigor of games, not of angels." Its construction, like that of literature, is artificial, and its parts are manipulated by its maker.

The notion of the totalization of knowledge is a common theme throughout Borges's collection of short stories entitled *Ficciones*. Although ultimately showing the encyclopedic quest to be impossible, Borges portrayed it with ironic detachment. His short story "Tlön, Uqbar, Orbis Tertius" featured an encyclopedia of a fictional civilization, giving dimension and justification to a non-existent region. Borges argued that the nature of the encyclopedia is artificial by demonstrating that entire systems of belief, of education, of literature—indeed an entire civilization—can be created on the basis of imaginative structures.

This limited edition of *Ficciones* features silk-screen illustrations by Sol Lewitt (fig. 53). (Moser 1981a, Swigger)

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