LEXICON TECHNICUM

SUBTITLE
Or: An Universal English Dictionary of Arts and Sciences:
Explaining not only the Terms of Art, but the Arts Themselves

HISTORY

The author of the Lexicon Technicum, John Harris (1667-1719), was a clergyman, mathematician, and topographer, as well as secretary of the Royal Society.

The first volume of the Lexicon Technicum, published in 1708, contains 1220 pages, 4 plates, and many diagrams and figures within the text; as common in encyclopedias, the pages are not numbered.

A second volume was published in 1710. A large part of the volume consists of mathematical and astronomical tables, since Harris intended his work to serve as a small mathematical library. It also includes an index of all the articles. They are categorized under 26 heads, filling 50 pages. The categories with most articles are: law, surgery, anatomy, geometry, fortification, botany, and music.

A third edition (two folio volumes, 1716-23), a fourth edition (one folio volume, 1725) and a fifth edition (two folio volumes, 1736) were published. Lastly, an anonymous one-volume supplement appeared in 1744.

GENERAL INFORMATION

• This work is considered to be the first general encyclopedia to emphasize science
• In the preface, Harris explains that he copied or borrowed very little from previous dictionaries. He rather collected directly from the authors. In physics, astronomy, and mathematics for example he turned to Newton.
• Harris created a very modern and up to date encyclopedia, because he relied mostly on the researches of his contemporaries in the sciences and because he consciously focused on modern advances
• He included some very strong personal opinions about certain topics
• The frontispiece is an engraved portrait of Harris, by G. White after R. White.

HELPFUL LINKS

Details of the second edition:
http://cyclopaedia.org/1708/1708lexicon2nd.html
CYCLOPÆDIA:
OR, AN UNIVERSAL DICTIONARY OF ARTS AND SCIENCES

SUBTITLE OF THE FIRST EDITION

Cyclopaedia, or, An universal dictionary of arts and sciences: containing the definitions of the terms, and accounts of the things signify’d thereby, in the several arts, both liberal and mechanical, and the several sciences, human and divine: the figures, kinds, properties, productions, preparations, and uses, of things natural and artificial; the rise, progress, and state of things ecclesiastical, civil, military, and commercial: with the several systems, sects, opinions, &c; among philosophers, divines, mathematicians, physicians, antiquaries, critics, &c: The whole intended as a course of ancient and modern learning.

HISTORY

Ephraim Chambers’ Cyclopaedia was published in two volumes, in London, 1728. This first edition was very well received and Chambers was soon after elected a Fellow of the Royal Society. In the eighteenth century it got republished several times: five more editions in London (1739 to 1751–1752); one edition in Dublin (1742); an Italian translation in 1748/49 was the first complete Italian encyclopaedia.

The second edition appeared in 1738 in folio. Chamber did alter some articles and images for the second edition, but he was prevented from doing more alterations, because the booksellers were alarmed by a bill, that obliged the publishers of all improved editions of books to print their improvements separately. Though it was thrown out unexpectedly, they were fearing that it might be revived.

At Chambers death, in 1740, he had collected and arranged materials for seven new volumes. The Supplement was published in London in 1753 in two folio volumes with 3307 pages and 12 plates. Hill, who published the Supplement, was a botanist, and the botanical part, which had been weak in the Cyclopaedia, was the best in the Supplement.

The minister Abraham Rees published a revised and enlarged edition in 1778/88. The new edition had an index of articles, classed under 100 heads, numbering about 57,000 and filling 80 pages.

GENERAL INFORMATION

• The Cyclopaedia was one of the first general encyclopedias to be produced in England and widely thought of as the father of the modern encyclopaedias.
• It served as the primary inspiration for Diderot and d’Alembert’s Encyclopédie.
• The Cyclopaedia was inspired by John Harris’ Lexicon Technicum of 1704.
• Special elements of the Cyclopaedia were the use of cross-references, the dedication to the King, George II and the ‘Plan of the Work’ within the prefatory section: an analysis of forty-seven divisions of knowledge, with classed lists of the articles.

FRONTISPIECE

The frontispiece in the first edition, an inverted and slightly altered copy of Sébastien Le Clerc’s engraving of the L’Académie des sciences et des beaux-arts, was done by John Sturt. It represents the whole range of arts and sciences. The most prominent of the alterations is the young man in the foreground having his palm read, this central figure has been transformed by Sturt into a character of a more feminine appearance. The Magician is no longer occupied with a consultation but appears rather to be indicating with his cane the title ‘CYCLOPAEDIA’. In Le Clerc’s engraving one also observes a small boy beside the Magician, typically the boy is emphatically presenting his palm so that it too might also be consulted. Perhaps the modified Magician of the frontispiece is suggesting to the boy that he will find it more profitable to consult the Cyclopaedia. The frontispieces are done by different engravers in the different editions.

HELPFUL LINKS

Chambers Cyclopaedia online
http://uwdc.library.wisc.edu/collections/HistSciTech/Cyclopaedia
The Frontispiece online
http://cyclopaedia.org/frontispieces/detail.html
HISTORY

In 1745, le Breton set out to publish a translation of Ephraim Chambers’ *Cyclopaedia* of 1728. He fired the two translators he hired, after claiming to be disappointed with their work.

In 1747 Jean Paul de Gua de Malves became chief editor and was soon replaced by Denis Diderot and Jean le Rond d’Alembert. De Malve already had the idea of writing a modern and autonomous version, rather than just translating the *Cyclopedia*. Diderot radicalised this idea. By then Breton has found co-publishers to finance the project with him, because the project had become too big to be financed by a single person.

In 1749 Diderot was arrested but came free the same year, promising that he won’t ever write blasphemic texts again.

In 1750 Diderot sent out a *prospectus*, announcing the publication of the *Encyclopédie*, aiming to gain subscribers. The *Encyclopédie* should consist of 8 volumes, with 600 tables and 61,000 articles. The subscribers should pay 280 livre, equivalent to about 2400-2700 pounds.

Diderot wrote a number of articles himself. He was also responsible for some adjustments and alterations to other articles. In some of the unsuspicious articles Diderot writes about his political views.

In 1751 the encyclopaedia was adjudicated the royal privilege and the first two volumes were released.

The publication was an enormous success, but Jesuits and the Sorbonne convinced the *Conseil du roi* to suspend the privilege and the *Encyclopédie* was later even put on the Index by the Pope. But because of some influential connections the *Encyclopédie* never ceased to be printed. In the last 10 volumes the ‘place of publication’ was faked: even though the books were printed in the French province, in the imprint it said Neuchâtel, Switzerland.

In 1764 Diderot noticed that Breton had altered or cut out entire section in the last volumes, without anyone’s approval and was deeply disappointed, however kept on working with him.

In 1772 the project terminated with the last one of the 11 books with illustrations being published. The *Encyclopédie* then consisted of 17 volumes of articles (issued from 1751 to 1765) and 11 volumes of illustrations (issued from 1762 to 1772).

GENERAL INFORMATION

- **Contributors** The *Encyclopédie* was planned to be a group project, with many different contributors from early on. Some famous authors were: Jaucourt, Montesquieu, Rousseau and Voltaire.
- **Topics** The three main topics are sciences, free arts, mechanical arts. The special emphasis on mechanical arts is an innovation. Ideas of the enlightenment period are represented in many articles throughout the *Encyclopédie*.
- **Print Run** The *Encyclopédie* was published in large quantities. The normal print run for a book was between 500 and 1000 examples. However, the first edition of the *Encyclopédie* was printed 1625 times, the last ones even 4200 times.
- **Audience** The audience were wealthy, educated upper class people, the nobility and the clerus.
INTRODUCTION
The introduction to the *Encyclopédie*, D’Alembert’s ‘Preliminary Discourse’, presents a system of classification of human knowledge, which was inspired by Francis Bacon’s *The Advancement of Learning*. The three main categories are: Memory (History), Reason (Philosophy), and Imagination (Poetry). A detail that stirred controversy is that ‘religion’ is categorized under ‘reason’.

FRONTISPIECE (executed 1764)
engraved in 1772 by Bonaventure-Louis Prévost (1747-1804?)
based on an original sketch by Charles-Nicolas Cochin (1715-1790)

‘Beneath an Ionic Temple, the Sanctuary of Truth, one sees Truth enveloped in a veil and radiating light which parts the clouds and disperses them. To the right, Reason and Philosophy are busy, one in raising the veil from Truth, the other in tearing it away. At her feet, Theology, on her knees, receives the light from on high. In following this chain of figures, one finds on the same side Memory, Ancient and Modern History; History records the pomp and ceremony, and Time serves as its support. Below them are grouped Geometry, Astronomy, and Physics. The figures below this group represent Optics, Botany, Chemistry, and Agriculture. At the bottom are several Arts and Professions which derive from the Sciences. At the left of Truth one sees Imagination, who positions herself to adorn and crown Truth. Below Imagination, the artist has placed the different genres of Poetry: Epic, Dramatic, Satire, and Pastoral. After that come the other Arts of Imitation: Music, Painting, Sculpture, and Architecture.’

Diderot

HELPFUL LINKS
Online encyclopedia of Diderot and d’Alembert:
http://quod.lib.umich.edu/d/did/index.html
SUBTITLE
First Edition: Dictionary of Arts and Sciences, compiled upon a new plan.

HISTORY
In 1768 Colin Macfarquhar, a bookseller and printer, and Andrew Bell, an engraver, hired William Smellie and charged him with creating the Encyclopædia Britannica. The Encyclopædia Britannica appeared in weekly instalments over a three-year period. The first number appeared in 1768 in Edinburgh, priced sixpence or 8 pence on finer paper. The three-volume set was completed in 1771, and the printing soon sold out.

GENERAL INFORMATION, FIRST EDITION
- Macfarquhar and Bell were inspired by the intellectual ferment of the Scottish Enlightenment.
- The key idea, that set the Encyclopædia Britannica apart was to group related topics together into longer essays, that were then organized alphabetically.
- Smellie wrote most of the first edition himself, borrowing liberally from the authors of his era.
- Some of the 160 engravings by Bell (e.g.: anatomically accurate depictions of dissected female pelvises and of foetuses in wombs for the midwifery article) were so shocking, that King George III commanded that the pages be ripped from every copy.
- The first edition included many mistakes, Smellie however argued that this was inevitable.
- Because the style of writing and the easy navigation of the first edition were so popular, it sold out quickly.

The second edition (1777-84) ran to 10 volumes. The third, completed in 1797 and the first to include articles by outside contributors, comprised 18 volumes. It was published as 300 weekly numbers.

The third edition was produced between 1788 and 1797. When Macfarquhar died in 1793, Bell buys is heirs out and became sole owner of the Encyclopædia Britannica. Bell hired George Gleig, to carry on the job as editor for the remainder of the third edition.

GENERAL INFORMATION, THIRD EDITION
- The title pages were not printed with their volumes but when the set was completed, and dated the year of completion. All volumes of the third edition have the title pages dated 1797.
- Some printings of the third edition contain 20 volumes; the first 18 are text, the last two copperplates and maps. Other printings are 18 volumes with all the copperplates and maps interspersed throughout at their proper places.
- The third edition established the foundation of the Encyclopædia Britannica as an important and definitive reference work for much of the next two centuries.

Until today many editions followed. In 1993 the Encyclopædia Britannica made the entire text available on the Internet, becoming the world's first online encyclopedia.