

# Johannes Gutenberg: Man of the Millennium

eBook and eDocuments  
ProjectGutenberg.info



## **World eBook Library**

The World eBook Library, [www.worldLibrary.net](http://www.worldLibrary.net) is an effort to preserve and disseminate classic works of literature, serials, bibliographies, dictionaries, encyclopedias, and other reference works in a number of languages and countries around the world. Our mission is to serve the public, aid students and educators by providing public access to the world's most complete collection of electronic books on-line as well as offer a variety of services and resources that support and strengthen the instructional programs of education, elementary through post baccalaureate studies.

This file was produced as part of the "eBook Campaign" to promote literacy, accessibility, and enhanced reading. Authors, publishers, libraries and technologists unite to expand reading with eBooks.

\*This eBook has certain copyright implications you should read.\*

This book is copyrighted by the World eBook Library. With permission copies may be distributed so long as such copies (1) are for your or others personal use only, and (2) are not distributed or used commercially. Prohibited distribution includes any service that offers this file for download or commercial distribution in any form, (See complete disclaimer <http://worldlibrary.net/Copyrights.html>).

John S. Guagliardo, Ph.D., Executive Director  
World eBook Library Consortia  
P.O. Box 22687  
Honolulu, Hawaii 96823  
(808) 292-2068  
[Guagliardo@netlibrary.net](mailto:Guagliardo@netlibrary.net)



# Johannes Gutenberg

## Man of the Millennium



The literary world was changed with the invention of movable type and its application to a series of known practices which were integrated into a method of mass production. The printing press had developed from the wine press in the Rhine Valley. It was there in 1440 that Johannes Gutenberg (c.1397-1468) began using the printing press in conjunction with a series of blocks each bearing a single letter on its face. The press used by Gutenberg was a hand press, in which ink was rolled over the raised surfaces of hand-set letters held within a wooden form and the form was then press against a sheet of paper. Gutenberg's name does not appear on any of his work but he is generally accredited with the world's first book printed with movable type, the 42-line (the number of lines per page) Bible, also known as the Gutenberg Bible or the Mainz Bible (for the place where it was produced).

In three decades, printing spread across Europe where it became one of the chief means by which the Renaissance, the humanist re-birth of interest in learning and the classics, was transmitted from culture to culture. In time the printed book became a means of political revolution, the necessary technological corollary for the

rise of the vernacular (ie. non-Latin) as a vehicle for literary texts, and the larger democratic revolutions of the eighteenth century.

In 1814, *The Times* of London introduced the first steam-press. Other technological innovations, such as linotype, invented in 1884 by Ottmar Mergenthaler, and the monotype machine, first used in 1897, helped increase the ease with which a page could be type-set. Together, these new methods of mass production helped pave the way to the growth of a mass reading public, a public which finally wrested literature from the closed circles of the educated and wealthy. This revolution entailed not simply a change in the world of literature but, as Marshall McLuhan wrote, a change in consciousness itself.

In 2000, in honor of his invention Johannes Gutenberg was recently chosen by an international panel of scientists as the "most outstanding personality of the millennium.". For the next Millennium predictions are being made that digital press will equally change the literary world. Project Gutenberg is a global coordinated volunteer effort to digitize and distribute the great works of our predecessors.



The Time of Gutenberg

**Introduction**

The 15<sup>th</sup> century marks the transition from the Middle Ages to Modern Times. In virtually all areas of human interaction there were far-reaching changes. Dangerous and long sea voyages of Portuguese and Spanish explorers opened up new worlds, while in Europe, the old world, the political balance of power was completely remodeled.

Technical innovations, a marked increase in written communication even outside monastery walls, attempts to reform the church, a first spread of



Gutenberg's Invention

**The invention**

Before Gutenberg woodblock printing was common. A sheet of paper was laid over the inked woodblock and an impression taken by rubbing - a complex and lengthy procedure.



The basic idea of Gutenberg's invention was the splitting up of the text into individual components such as lower and upper case letters, punctuation marks, ligatures and abbreviations, based upon the tradition of medieval scribes. These individual components were cast in any quantity as type in

humanistic thought, as well as new art forms were some of the positive developments of this time. On the negative side however horrible inquisition proceedings and many long-lasting wars were also part of the many contradictions of Johannes Gutenberg's century.

Only when looking at it within the context of these changing times can Gutenberg's invention be understood. The schedule of events of the 15<sup>th</sup> century presents an overview of the political and cultural developments of this era. Further information on the life and work of the inventor can then be found in a comprehensive summary of the most important dates and facts or in the detailed article on Gutenberg and his time.

reverse, then put together to form words, lines and pages. The prototype for each letter was the punch. A character was cut into the face of a steel block, resulting in a precise relief in reverse. Now the respective punch was struck into a rectangular block made of softer metal, probably copper, with a hammer-blow.

This matrix had to be worked over again and adjusted turning it into a right-angled cube with even sides. The righth-reading picture had to have a uniform depth, therefore the surface was processed with a file. To facilitate the casting of a character, Gutenberg developed the hand casting instrument. Two sections enclose a rectangular casting void closed at one end by the matrix.



After casting the characters in the hand casting instrument, the most important part of the invention, enabled quick casting of the required quantities of the different characters

needed. The casting metal was an alloy of lead, tin and further admixtures, that secured fast cooling and a sufficient durability under the high pressure of the press.

The printing press which led to a considerable acceleration of the method so far used of taking an impression by rubbing, was a screw press with special equipment for the effective and even transfer of the type from the form to the paper or parchment.

