

MAKING CONNECTIONS

How Did the Printing Press Change History?

First, read the article on this page. Then study the chronology and answer the questions on the second page.

Before Johannes Gutenberg invented the printing press in 1440, books had to be copied by hand. This was a slow, painstaking process that could take more than a year for each book, and the people copying them often made mistakes. Very few books were published, and they were available only to monks and scholars.

Gutenberg's invention pulled together several different technologies. He combined block printing, a Chinese technique brought to Europe by Marco Polo, with the press used to make wine and olive oil. His great innovation was movable type—sets of letters made out of metal. Instead of having to carve a solid block of wood for every single page, printers could rearrange the letters and reuse the type to print new pages.

The first book that Gutenberg published was probably *Ars Minor (The Smaller Art)*, the most commonly used textbook for teaching Latin grammar in schools. Existing copies of it are believed to date from as early as 1451. Around 1455, Gutenberg printed the first-ever complete edition of the Bible in movable type—an act that enshrined him in history.

Spreading the Word

By 1500, printing shops were in every major city in Europe. They had produced more than 8 million copies of books. Most of the books they put out were Bibles and religious texts, but they also published romance novels, collections of art by the German printmaker Albrecht Dürer, and classics by the Roman poet Ovid.

Although many people couldn't read, books spread knowledge to bakers and merchants as well as to lawyers and knights, writes historian Elizabeth L. Eisenstein. "Gifted students no longer needed to sit at the feet of a given master in order to learn a language or academic skill. Instead, they could achieve mastery on their own, even by sneaking books past their tutors."

Europe's rulers were quick to recognize the printed

word's power to transmit subversive (rebellious) ideas. In 1501, Pope Alexander VI threatened to excommunicate anyone who printed anything without clearing it with authorities of the Catholic Church. He was right to feel threatened. Books published by Martin Luther and John Calvin in the 1520s and 1530s spread the ideas of the Protestant Reformation.

In 1543, Nicolaus Copernicus, a Polish astronomer, published *On the Revolutions of Heavenly Spheres*. It explained his theory that Earth revolves around the sun. That challenged the idea that the sun revolves around Earth, which had become part of Church teachings.

In 1620, British philosopher Francis Bacon wrote that printing, gunpowder, and the compass were the three inventions that "have changed the appearance and state of the whole world."

The First Newspapers

In the late 1500s, pamphlets and newsletters appeared occasionally in German cities. They carried business news and more sensational stories, such as the fiendish tortures used by the bloodthirsty Transylvanian prince Vlad Dracula—the inspiration for the legend of Dracula. The Italian city-state of Venice published a newsletter in 1556. It sold for one *gazetta*, a small coin—the origin of the English word *gazette*, another term for newspaper.

Relation, the first regular newspaper, appeared in 1605 in Strasbourg, then an independent city on the border between France and Germany. It was followed by others in Germany, Belgium, Amsterdam, London, and Paris. The Swedish government newspaper *Post-och Inrikes Tidningar (Post and Domestic News)*, founded in 1645, is the oldest newspaper still in existence. (Since 2007, it has been published only online.) The first American newspaper was *Publick Occurrences*, published in Boston in 1690. The British banned it after one issue.

—Steven Wishnia

CHRONOLOGY

- 1398:** Johannes Gutenberg is born in Mainz, Germany.
- 1440:** Gutenberg first displays the printing press.
- 1451:** Gutenberg publishes the Latin textbook *Ars Minor*.
- 1455:** Gutenberg publishes the first printed version of the Bible.
- 1468:** Gutenberg dies.
- 1475:** William Caxton prints the first English-language book.
- 1501:** Pope Alexander VI tries to censor printed matter.
- 1520:** Martin Luther publishes three books.
- 1543:** Copernicus publishes his astronomical theories.
- 1556:** The city-state of Venice publishes a newsletter.
- 1605:** *Relation*, the first regular newspaper, is first published in Strasbourg.
- 1690:** The first and only issue of *Publick Occurrences*, the first American newspaper, is published in Boston.

QUESTIONS

- How were books made before the printing press was invented? _____

- How long did it take to make a book before the invention of the printing press? _____

- What was Gutenberg's key innovation? How did it help? _____

- What were the first books Gutenberg printed? _____
- When did the first regular newspaper come out? _____
- Name two subjects in which books published in the 1500s challenged established ideas. _____
- How were people able to learn from books in ways that they couldn't before printing was invented? _____

- What large group of Europeans was unable to do this? _____
- Why might some people in power want to censor books and other printed matter? _____

- Do you think that the Internet and computers are having as big an impact on society as the invention of printing? Why or why not? _____

