

## What Was the Most Important Consequence of the Printing Press?

### Introduction

In the fall of 1999, Arts & Entertainment Television aired a three-hour series titled, "Biography of the Millennium." The show picked Johannes Gutenberg as the most influential person of the last thousand years. In the 1450s, Gutenberg revolutionized the world by inventing the printing press. Many experts were surprised and even outraged by A & E's choice. Yes, Gutenberg was a significant inventor, but was he as important as scientific geniuses like Isaac Newton, Charles Darwin, and Albert Einstein? And certainly he could not hold a candle to great artists and thinkers like Michelangelo, William Shakespeare, or Thomas Jefferson.

The A & E expert panel vigorously defended Gutenberg. They argued that without his invention all of the above thinkers would never have emerged. Newton (#2 on the list), for example, developed his scientific theories only after reading the works of other great thinkers. Yes, Newton was brilliant (after all, he did invent calculus), but he stood on the shoulders of other thinkers whom he had only met through written works.

This DBQ asks you to look closely at how printing affected different areas of life. To answer the DBQ question you will need to do two things: 1. Examine each document to discover how printing changed one aspect of the world; and 2. Determine what area of change was the most important and argue why. Before tackling these two tasks, a short look at the history of printing and Gutenberg's invention are in order.

### The Communications Revolution

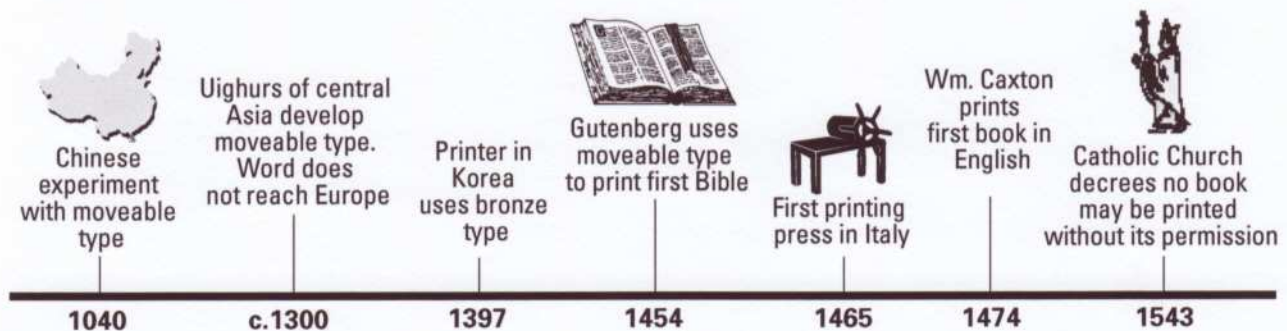
Gutenberg's invention was really the end of a long evolution in human communication. At some point in human development, man developed a spoken language. Where language comes from is difficult to say. Some think that long before our ancestors began to speak, about 25,000 years ago, they used sign language. This ability may have developed as early as two million years ago.

Much later, about 20,000 years ago, our human ancestors drew pictures on cave walls in France, and about 8,000 years ago the Mesopotamians developed picture writing. The Egyptians wrote **hieroglyphics**, combining pictures, letters and syllables on **papyrus** (which is formed by layering reeds) as early as 3100 BCE.

Probably the greatest event in the evolution of human communication before the printing press was the invention of the alphabet. When and where the alphabet was first used remains a matter of debate. Best guesses attribute the beginning to the Phoenicians about 1500 BCE. The amazing thing about the alphabet is that every sound we can imagine can be shown by some combination of 26 letters. The alphabet is powerful because it is so simple. It is its simplicity that allows it to be used by inventions like the printing press in unique ways.

### Origins of Paper and Books

The printing press would not have been possible without the invention of paper. For centuries people had written on animal skins. And as far back as 105 CE the Chinese had invented paper.



Slowly, papermaking technology spread to Europe where in the 1400s Italian merchants developed mass production techniques.

Gutenberg was a businessman and knew about the availability of cheap and durable paper. He also knew in the mid-1400s that something special was going on in Europe. This something was the beginning of what historians call the **Renaissance**, a time when ideas, old and new, were exploding across Europe like never before. Of course it was the book that was helping spread these ideas and Gutenberg wanted to make a less expensive book.

Before Gutenberg's press, monks handwrote books with pen and ink in a copying room known as a **scriptorium**. Even a small book could take months to complete, and a book the size of the Bible could take several years. By the 1400s mass production scriptoria did exist with over 50 scribes writing away as a single reader dictated a text.



### Origins of Printing

The Chinese, around 600 CE, were the first to use something called **woodblock printing**. With wood blocks a whole page of text could be printed at one time, but once carved, a woodblock could not be changed and often the woodblock carving would crumble after a short time. The Chinese are also credited with inventing **moveable type**. This process allowed a printer to place letters side by side and form sentences and pages. Once the page was printed, a printer could rearrange the letters to form a new page. The problem was that the Chinese language has over 50,000 characters, so moveable type technology was not practical. Somebody had to come along with a simpler language and an ability to carve out the letters in something more durable than wood. That someone was Gutenberg.

### Gutenberg and His Invention

As a goldsmith in Mainz, Germany, Gutenberg developed the necessary skill to carve letters out of metal. Once enough letters were created, one could move the letters around arranging them to form all the words and sentences on a page. This process was called **typesetting**.

Once a page had been typeset a person called a **composer** would screw together all of the typeset letters into a solid form and place them on a lower level of the printing press. The type would be inked and paper placed on top.

The flat upper plate of the press would be screwed down on top of the inked paper. A printer could make thousands of identical copies, then move on to the next page.

In 1455 Gutenberg printed 180 Bibles, each of them over 1800 pages long. There are only a few of these **Gutenberg Bibles** still in existence and each is worth over \$30 million. Gutenberg

knew that many people would look at these books as something strange or the work of the devil, so he made his type look identical to a scribe's handwriting. It worked, and the printing revolution erupted. By 1500, less than 50 years after the Gutenberg Bibles, over 20 million printed books were in existence.

### The Question

This DBQ asks you to examine how the printing press changed different aspects of human existence. Analyze the documents and determine the immediate effects of the printing press. Then decide which consequence was the most significant. There is no doubt that Gutenberg's printing press reshaped the world; the question for you is: *What was the most important consequence of the printing press?*

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