History of printing

The Origin of Printing and Typography

3000 BC and earlier

- The Mesopotamians use round cylinder seals for rolling an impress of images onto clay tablets.
- In other early societies in China and Egypt, small stamps(stone and wooden block printing) are used to print on cloth.

Second century AD

- A Chinese man named Ts’ai Lun was invented paper.

Seventh century

- A small book containing the text of the Gospel of John in Latin is added to the grave of Saint Cuthbert.

Origin of the book form; From Scroll to Codex

Manuscript

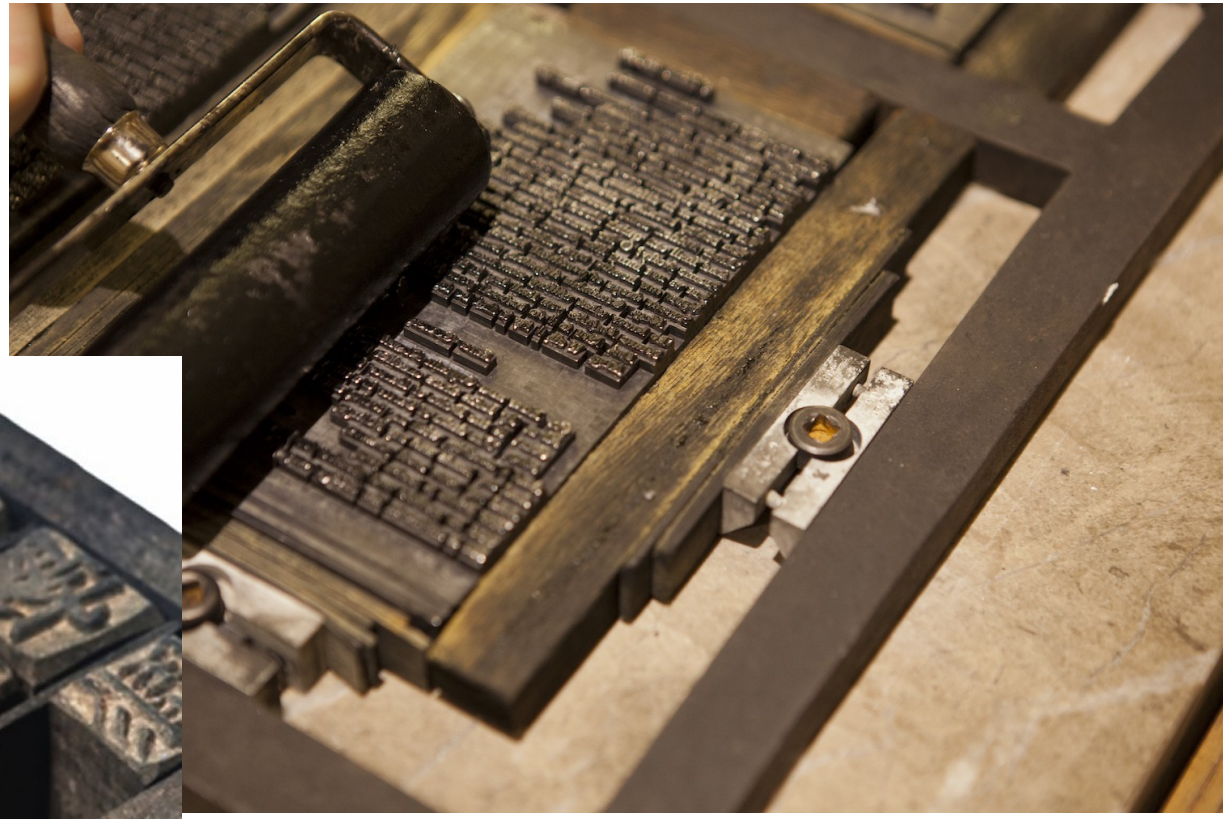
- To form a single, portable unit of reading material.

- A **codex** is essentially an ancient **book**, consisting of one or more quires of sheets of papyrus or parchment folded together to form a group of leaves, or pages.

Eleventh Century

- A Chinese man named Pi-Sheng develops type characters from hardened clay, creating the first movable type. The fairly soft material hampers the success of this technology.

- The world's first **movable type printing** technology for **printing** paper books was made of porcelain materials and was invented around 1040 AD in China during the Northern Song Dynasty by the inventor Bi Sheng (990–1051)



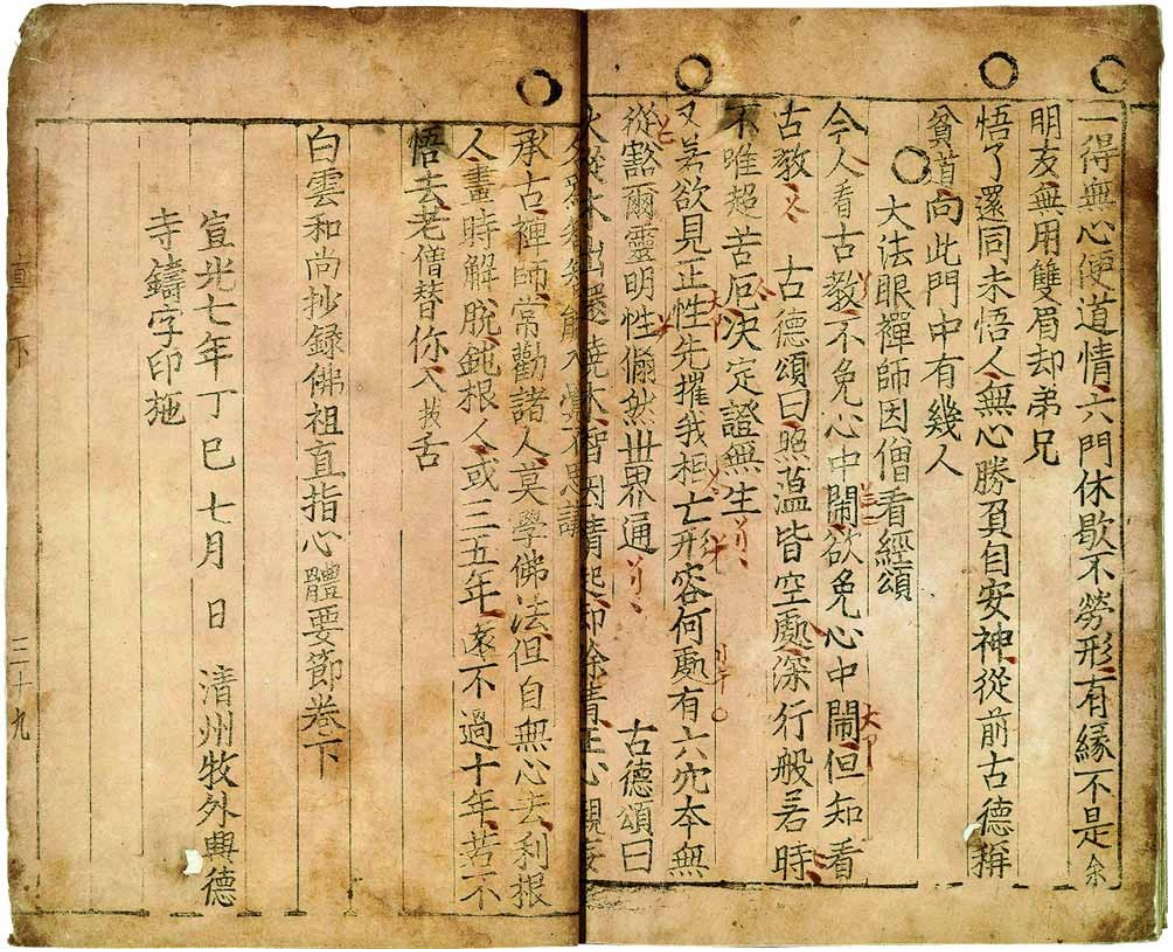
Twelfth century (Papermaking reaches Europe).

- The Egyptians learned the **paper making** from the Arabs during the early 10th century. Around 1100 A.D. **paper** arrived in Northern Africa and by 1150 A.D. it arrived to Spain as a result of the crusades and established the first **paper industry** in **Europe**.

Thirteenth century

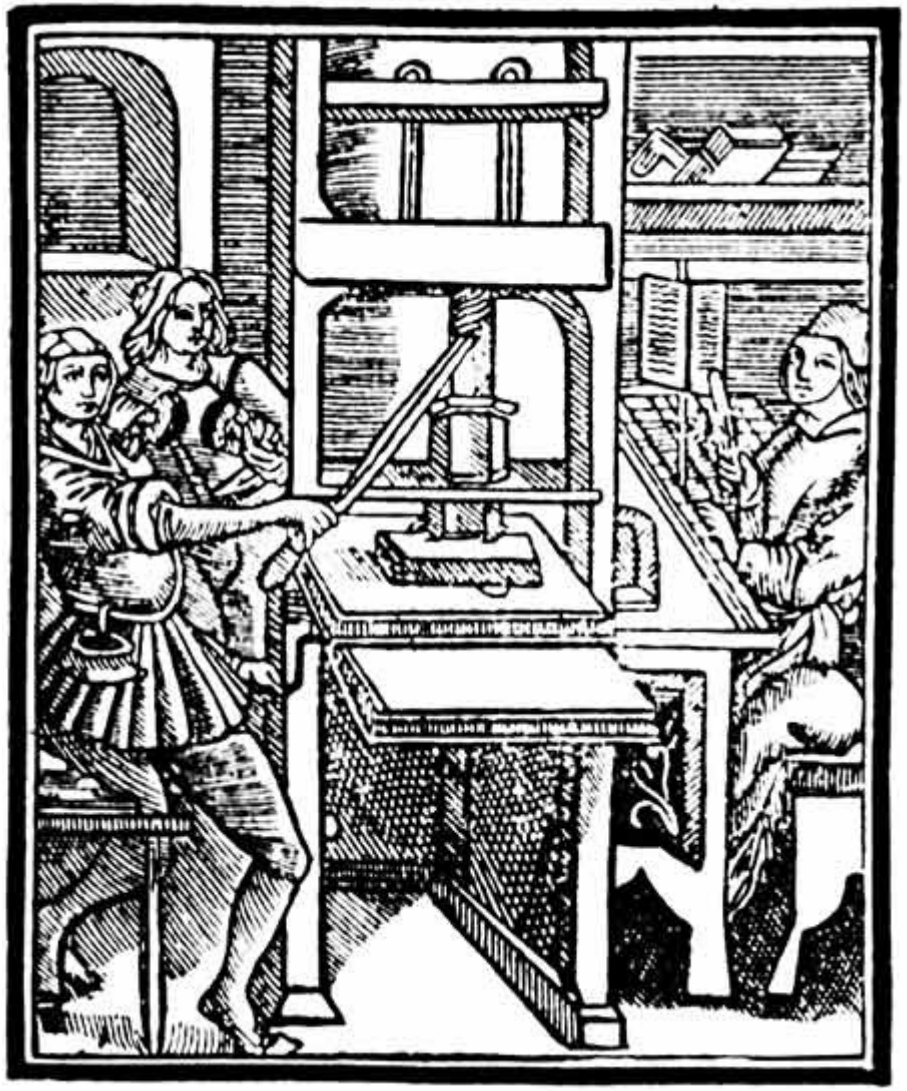
- Type characters cast from metal (bronze) are developed in China, Japan and Korea. The oldest known book printed using metal type dates back to the year 1377.

- It is a Korean Buddhist document, called *Selected Teachings of Buddhist Sages and Seon Masters*.



Fifteenth century

- In 1436 **Gutenberg** begins work on a printing press. It takes him 4 years to finish his wooden press which uses movable metal type. Among his first publications that get printed on the new device are bibles.
- The first edition has 40 lines per page. A later 42-line version comes in two volumes.

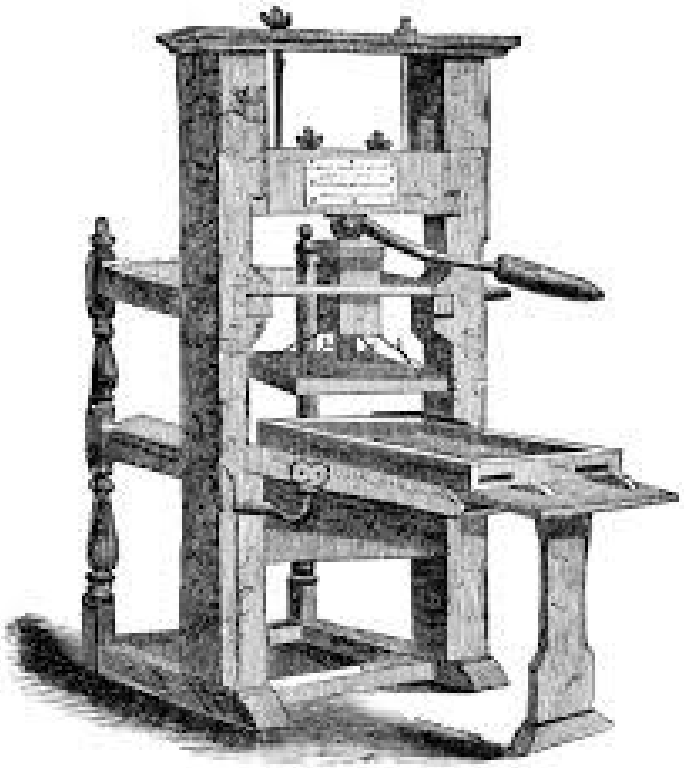


How the Printing Press Worked

- Gutenberg began by manufacturing the type that was needed in order to print. He began by creating a metal punch or key of each character. The keys were all the same size and small enough to grab with your thumb and finger. The pressman, the man who controlled the printer, would put the keys together to create words and would then put the words together in lines. The lines were locked into a frame to create a printing block, called a forme. The forme was then dipped in ink and pressed onto paper. Once the forme was used, the pressman could take out the keys and use them again to create another forme.

- Gutenberg wanted an ink that was dark enough to see easily but not too dark to bleed out what was being printed. He used an ink pigment discovered by painters in earlier years made of ground linseed-oil. He also needed a paper that would decrease smudging. The paper he used was manufactured in Europe and was made of linen and cotton cloth. This paper had a firm/hard surface that was great for printing.

- After years of experimenting, the finished printing press was created in 1450. We do not know the acutal date, due to limited information at the time. One to the first books printed on the printing press was the Gutenberg Bible.



- Before the printing press was created, only the church and the rich could afford books. The books where hand written which made them expensive. The printing press made it easy to make copies books so many different types of people could have access to them. The printing press made books in a relatively short time. It could print an average of 1,250 to 1,500 pages a day compared to it taking several months for a scribe to hand copy a gospel from the Bible. When the printing press was invented only thirty percent of European people could read. Years later, the literacy rate grew from thrity percent to forty-seven percent. The availability of printed material motivated the illiterate to learn how to read. The easy access to books spread knowledge across Europe and eventually the world

- After the printing press was created other inventors started to add modifications to improve its function. Inventors began adding metal parts to the wooden press in the eighteenth and early nineteenth century. This lead to the development of other types of printing presses such as the Stanhope Press and the Columbian Press. In the 1970's computers were integrated to the modern day printing press. Printers today spread even more knowledge than they did when the printing press was first invented