

Brief History of Printing

From the collection of Josh Self

(source material from Wikipedia unless noted)

Woodblock Printing

- Chinese and Asian beginnings (~200 AD)
- The rise of printing was greatly influenced by Mahayana Buddhism. According to Mahayana beliefs, religious texts hold intrinsic value for carrying the Buddha's word and act as talismanic objects containing sacred power capable of warding off evil spirits.



Early Woodblock

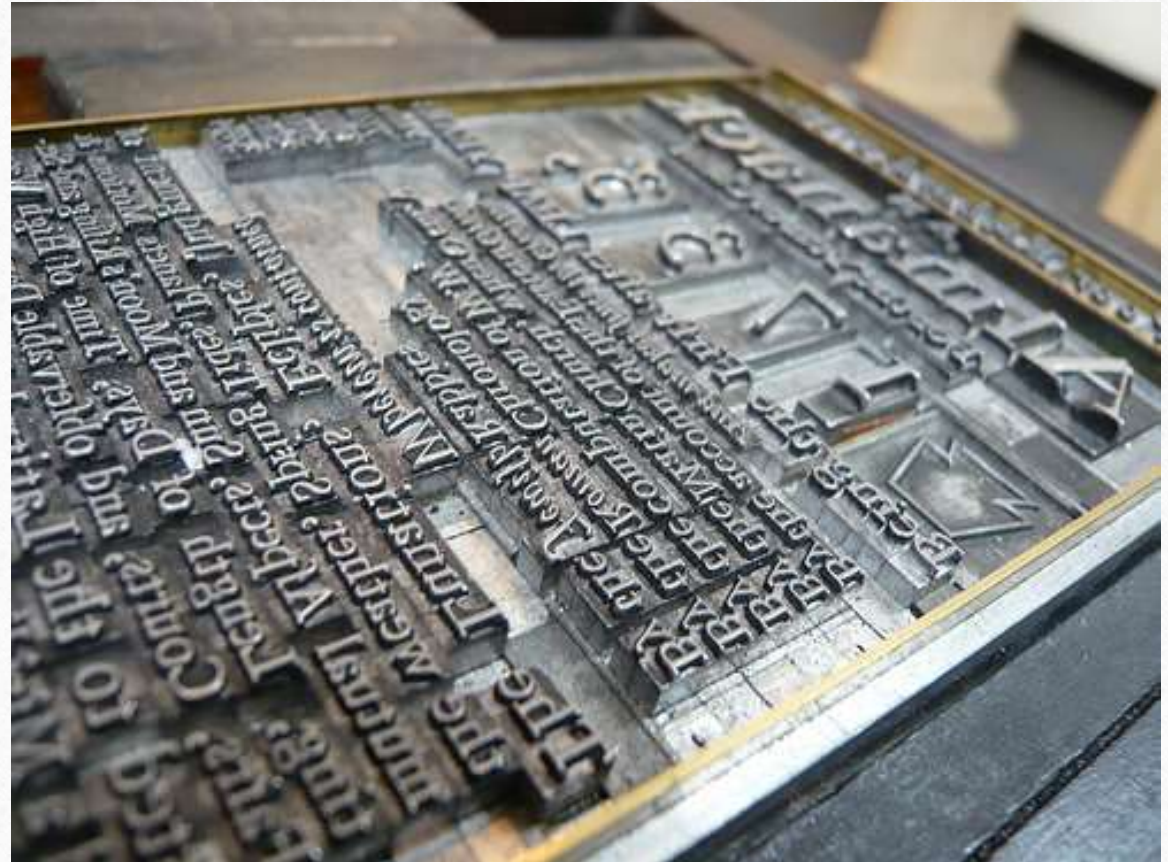
Piece of a Western Xia wooden printing block for a Buddhist text written in Tangut script.

Moveable Type (1041AD)

- Ceramic
- Wooden
- Metal (Copper, Tin)
- Compared to woodblock printing, movable type page-setting was quicker and more durable. The metal type pieces were more durable and the lettering was more uniform, leading to typography and fonts. The high quality and relatively low price of the Gutenberg Bible (1455) established the superiority of movable type, and printing presses rapidly spread across Europe, leading up to the Renaissance, and later all around the world.

Moveable Metal Type

It is traditionally surmised that [Johannes Gutenberg](#), of the German city of [Mainz](#), developed European movable type printing technology with the [printing press](#) around 1439^[48] and in just over a decade, the European age of printing began.



Page from Gutenberg Bible

Genesis 1



Printing jobs

- **Print shop apprentices:** Apprentices, usually between the ages of 15 and 20, worked for master printers. Apprentices were not required to be literate, and literacy rates at the time were very low, in comparison to today. Apprentices prepared ink, dampened sheets of paper, and assisted at the press. An apprentice who wished to learn to become a compositor had to learn Latin and spend time under the supervision of a journeyman.
- **Journeyman printers:** After completing their apprenticeships, *journeyman* printers were free to move employers. This facilitated the spread of printing to areas that were less print-centered.
- **Compositors:** Those who set the type for printing. (Plate makers)
- **Pressmen:** the person who worked the press. This was physically labor-intensive.

Printing Houses in Europe

Early printing houses (near the time of Gutenberg) were run by "master printers."

These printers owned shops, selected and edited manuscripts, determined the sizes of print runs, sold the works they produced, raised capital and organized distribution.

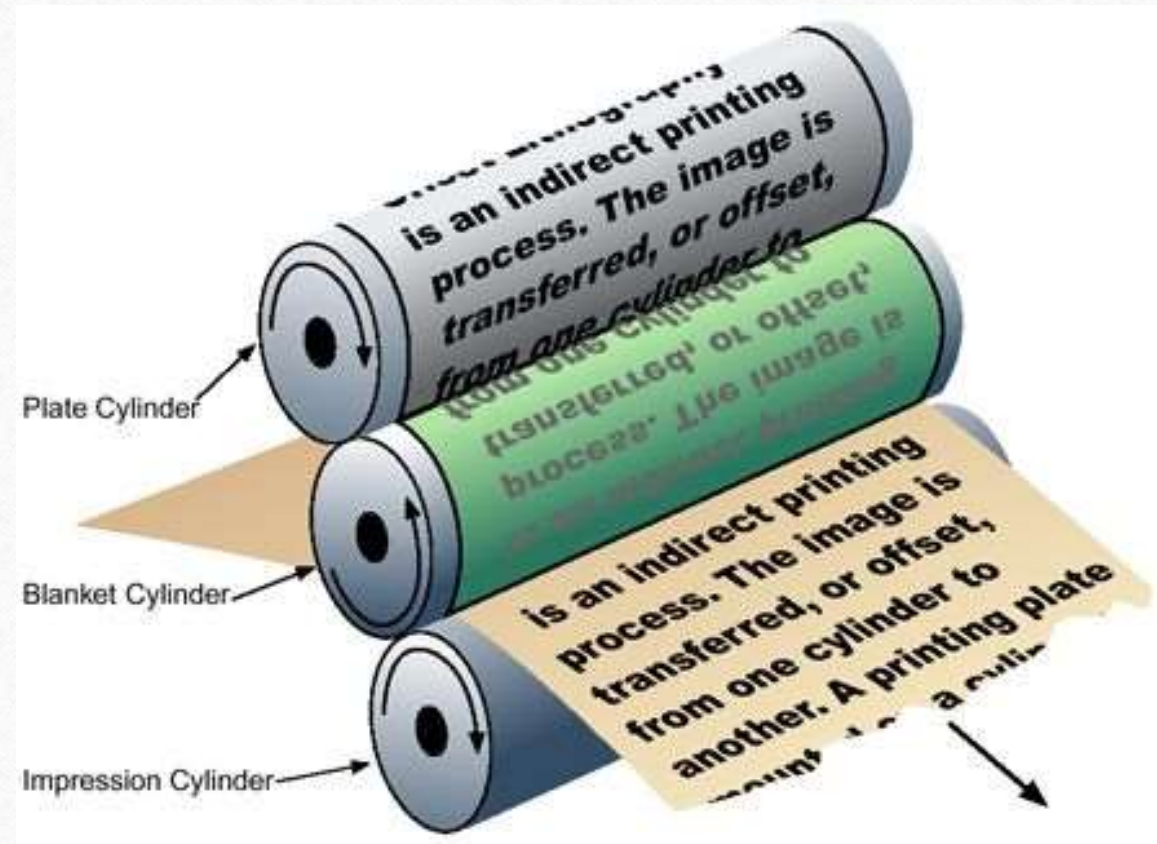


Modern Printing

- **Intaglio** /In'tæli.ou/ is a family of printmaking techniques in which the image is incised into a surface, known as the matrix or plate. Normally, copper or zinc plates are used as a surface, and the incisions are created by etching, engraving, drypoint, aquatint or mezzotint.
- **Lithography** (1796) - a printing process that uses chemical processes to create an image. (using water and positive/negative areas)
- **Offset printing (1870s – modern)** is a widely used printing technique where the inked image is transferred (or "offset") from a plate to a rubber blanket, then to the printing surface. When used in combination with the lithographic process, which is based on the repulsion of oil and water, the offset technique employs a flat (planographic) image carrier on which the image to be printed obtains ink from ink rollers, while the non-printing area attracts a film of water, keeping the non-printing areas ink-free.

Offset printing

Uses one set of rollers for each color (CMYK - Cyan, Magenta, Yellow, Black)



Josh's Bible Pages

- **Page from the Book of 1st Kings 1**
- Wood or metal type full page print on linen paper around 1590's (printer unknown)
- Hand colored Illuminations (illustrations) on both sides!

Josh's Bible Pages

- Biblia Sacra Graeae, Latine & Germanice (Holy Bible in Greek, Latin and German)
- Luke (*Lucas*) Chapter 10-11 in 3 different languages
- Printed by Jacobus Lucius Juni in Hamburg, Germany 1596 (woodcut on linen paper)
- Probably part of a Hamburg Polyglot
- A **polyglot** is a book that contains side-by-side versions of the same text in several different languages. Some editions of the Bible or its parts are polyglots, in which the Hebrew and Greek originals are exhibited along with historical translations. Polyglots are useful for studying the history of the text and its interpretation.

Hamburg Polyglot (1596)

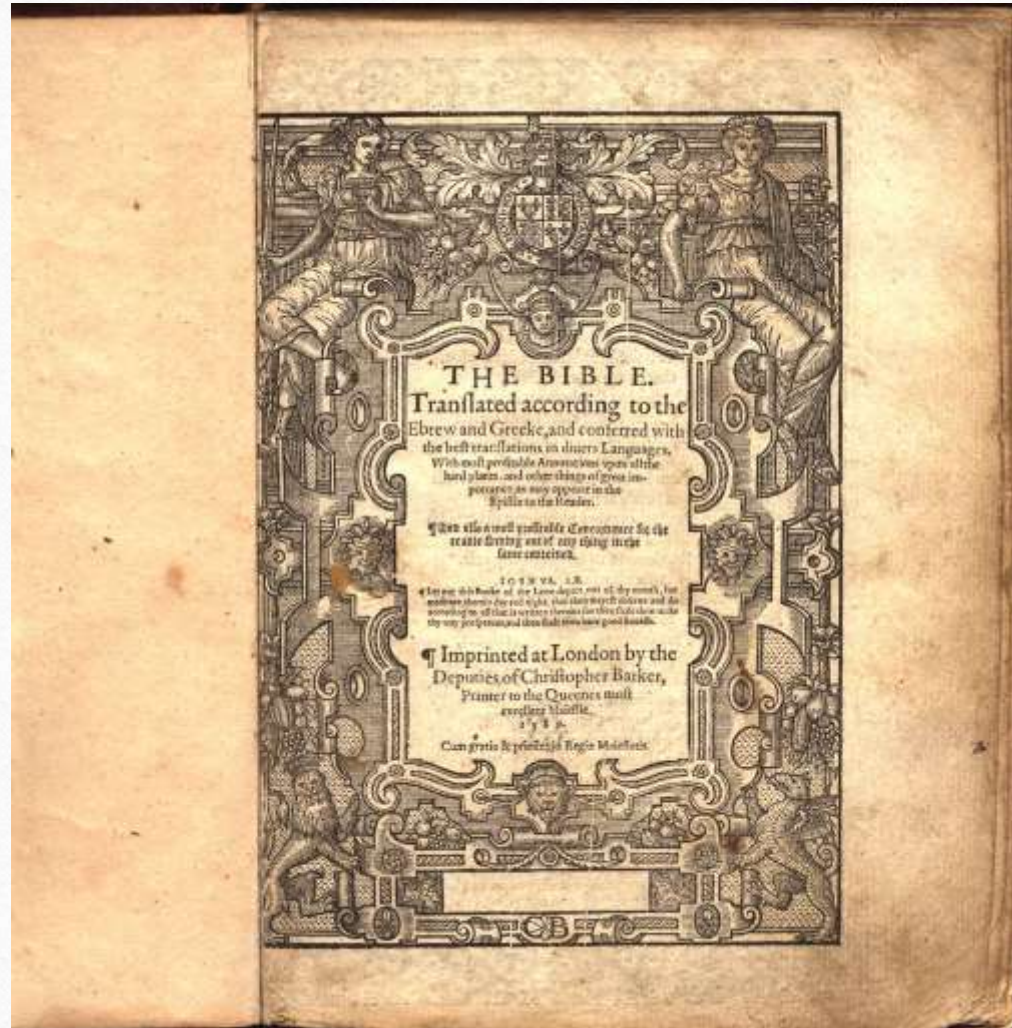
- [Polyglot Bible]. *Biblia Sacra Graece, Latine & Germanice opera Davidis Wolderi; in usum ecclesiarum Germanicarum.* Seven volumes bound as four in black silk.
Hamburg: Jacobus Lucius Juni, 1596.
- The “Hamburg Polyglot” includes the texts of the Greek Septuagint, St. Jerome’s Latin Vulgate, the modern Latin versions of Sante Pagnini (Old Testament) or Théodore de Bèze (New Testament), and Luther’s German. As a Bible intended for scholars, this polyglot edition is unusual in that it features a rich program of illustration.

Josh's Bible Pages

- **Geneva "Breeches" Bible (1603)**
- Printed by Robert Barker (printer to the crown), London 1603
- One interesting variation of the Geneva Bible is the so-called "Breeches Bible", the first of which appeared in 1579. In the Breeches Bible, Genesis Chapter III Verse 7 reads: "Then the eies of them both were opened, and they knew that they were naked, and they sewed figge tree leaves together, and made themselves breeches." In the King James Version of 1611, "breeches" was changed to "aprons". Geneva Bibles with the "breeches" passage continued to be printed well into the time of the King James Bible of 1611.

Geneva Bible

This is the Bible that was brought to the “New World”, the first Bible in America.



Geneva Bible vs. King James Version (1611)

Geneva

- “and the moon was like blood”
- “as a fig tree casteth her green figs”
- Daniel 4: I “Nebuchad-nezzar being at rest in mine house, and flourishing in my palace,”

King James

- “and the moon became as blood”
- “even as a fig tree casteth her untimely figs”
- Daniel 4 starts earlier with:
“Nebuchad-nezzar the king, unto all people, nations, and languages that dwell in all the earth, Peace be multiplied unto you.”

Geneva Bible vs. King James Version (1611)

- By and large, the difference is that the KJV lacked footnotes that the Geneva Bible contained. The KJV does use the serial comma.
- As can be seen by the text below, Daniel chapter 4 in the Geneva Bible appears to have removed two verses. In reality, the Geneva Bible places those two verses at the end of chapter 3, as the Hebrew, Greek, and Latin versions all did. It wasn't until the King James Version that those verses were placed with chapter 4 as opposed to chapter 3:

Josh's Bible Pages

- **Greek Septuagint Bible page from Psalms 122-130 (1653 AD)**
- Printed by Roger Daniel in London (1653 AD)

Greek Septuagint Bible

- The **Septuagint** (from the Latin *septuaginta*, "seventy") is a Koine Greek translation of a Hebraic textual tradition that included certain texts which were later included in the canonical Hebrew Bible and other related texts which were not. As the primary Greek translation of the Old Testament, it is also called the **Greek Old Testament**. This translation is quoted a number of times in the New Testament,^{[1][2]} particularly in Pauline epistles,^[3] and also by the Apostolic Fathers and later Greek Church Fathers.

Greek Septuagint Bible

- The title (Greek: Ἡ μετάφρασις τῶν Ἑβδομήκοντα, lit. "The Translation of the Seventy") and its Roman numeral **LXX** refer to the legendary seventy Jewish scholars who solely translated the Five Books of Moses into Koine Greek as early as the 3rd century BCE.^{[4][5]} Separated from the Hebrew canon of the Jewish Bible in Rabbinic Judaism, translations of the Torah into Koine Greek by early Jewish Rabbis have survived as rare fragments only.

Other early printed works

- *Hypnerotomachia Poliphili* - from Greek *hýpnos*, 'sleep', *éros*, 'love', and *máchē*, 'fight'), called in English *Poliphilo's Strife of Love in a Dream* or *The Dream of Poliphilus*, is a romance said to be by [Francesco Colonna](#). It is a famous example of an [Incunable](#) (a work of early printing, [printed](#)—not [handwritten](#)—before the year 1501 in [Europe](#)). The work was first published in 1499 in [Venice](#). This first edition has an elegant page layout, with refined [woodcut](#) illustrations in an [Early Renaissance](#) style. *Hypnerotomachia Poliphili* presents a mysterious arcane [allegory](#) in which the main [protagonist](#), Poliphilo pursues his love, Polia through a dreamlike landscape. In the last, he is reconciled with her by the "Fountain of Venus".

Hypnerotomachia Poliphili

- The book has long been sought after as one of the most beautiful incunabula ever printed.^[1] The typography is famous for its quality and clarity. Its roman typeface, cut by Francesco Griffo, is a revised version of a type which Aldus had first used in 1496 for the *De Aetna* of Pietro Bembo. The type is thought to be one of the first examples of the italic typeface, and in incunabula, it is unique to the Aldine Press.

TRIVMPHVS



ce ligatura alla fistula tubale, Gli altri dui cū ueterimi cornitubici con-
cordi ciascuno & cum gli instrumenti delle Equitante nymphe.

Sotto lequale triuiphale seinghe era lazide nel meditullo, Nelq̄le gli
rotali radii erano infixi, deliniamento Balustico graciliscenti sepoia
negli mucronati labii cum uno pomulo alla circunferentia. Elquale
Polo era di finissimo & ponderoso oro, repudiante el rodicabile erugio
ne, & lo incēdiofo Vulcano, della uirtute & pace extiale ueneno. Sum-

mamente dagli festigianti celebrato, cum moderate, & repentine
riolutiōe intorno saltanti, cum solemnissimi plausi, cum

gli habiti cincti di fasceole uolitante, Et le sedente so-
pra gli trahenti centauri: La Sancta cagione,

& diuino mysterio, in uoce colone & car-

mini cancionali cum extre

ma exultatione amo-

rosamente lauda

uano.

**

*

PRIMVS



EL SEQVENTE triuiphō nō meno mirauiglioso di primo. Impo
cheegli hauea le q̄tro uolubile rote tutte, & gli radii, & il meditullo desu-
sco achate, di cōside uēule uagamēte uaricato. Ne tale certaintē gestoere
Pyrho cū le noue Muse & Apolline i medio pulsate dalla natura ip̄sso.

Lazide & la forma del dicto q̄le el primo, ma le tabelle erio di cyaneo
Saphyro orientale, atomato descintillule doro, alla magica gratissimo,
& longo acceptissimo a cupidine nella sinistra mano.

Nella tabella dextra mirai exscalpto una insigne Matrōa che
dūi ouī hauea parturito, in uno cubile regio colloca-

ta, di uno mirabile pallacio, Cum obstetrice stu-

pefacte, & multe altre matrone & astante

Nymphe Degli quali uscua de

uno una flammula, & delal-

tro ouo due spectatissi

me stelle.

**

*

Examples of Incunabula

- Gutenberg Bible (1455)
- the *Nuremberg Chronicle* written by Hartmann Schedel and printed by Anton Koberger in 1493
- *Hypnerotomachia Poliphili* printed by Aldus Manutius (1499)

Other Items

- Old German Bible (1800s)
- Metal Type drawer from the Birmingham News (1940s) for Gothic Font size 36

Thanks for listening!

All source material from Wikipedia so please correct me if you see something wrong.

Josh