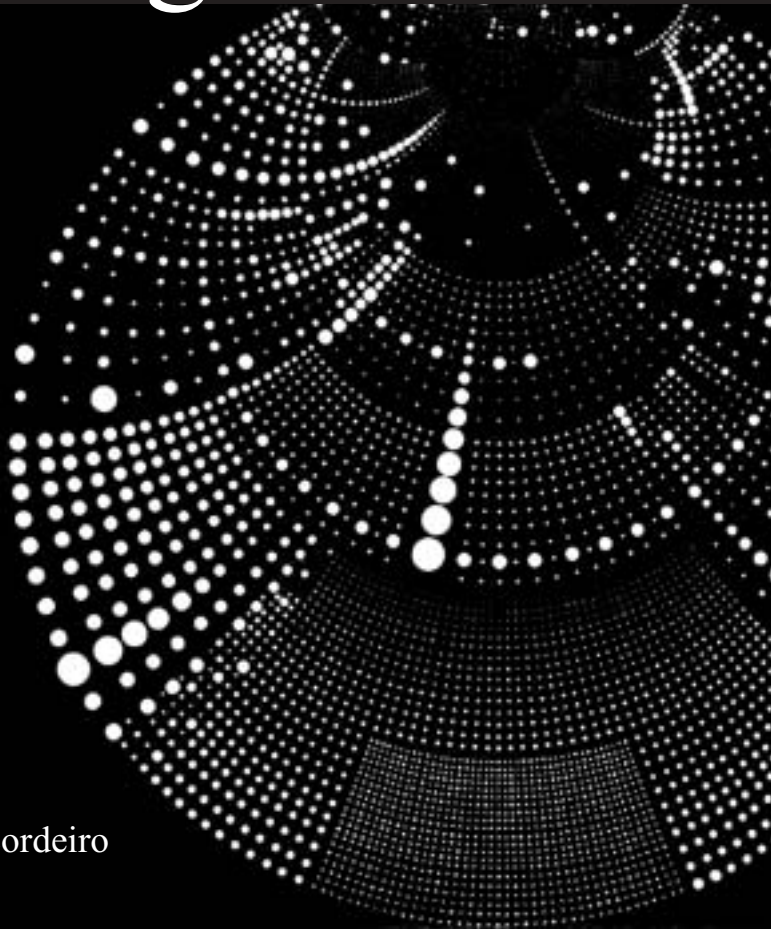


# The History <sup>of</sup> Graphic Design



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**Cover Image:** Takenobu Igarashi, poster for the Kanagawa Art Festival, 1984.

**Image 1:** Cave painting from Lascaux, France. Circa 15 000-10 000 B.C.

### Introduction

In 1922, book designer William Addison Dwiggins coined the term “Graphic Designer”. A Graphic Designer is someone who brings together the various elements of a page (words, pictures, colours) to form a visually attractive page.



Image 1

## Prehistory

**Image 2:** Cuneiform tablet, c. 2100 B.C. This clay tablet lists expenditures of grain and animals.

**Image 3:** These Egyptian hieroglyphs illustrate the rebus principle. Words and syllables are represented by pictures of objects and by symbols whose names are similar to the word or syllable to be communicated. These hieroglyphs mean bee, leaf, sea, and sun. As rebuses (using the English language) they could also mean belief and season.

### Prehistory

Graphic Design actually began millennia earlier with the invention of writing. With the creation of a written



Image 2

language, people now had to combine both text and pictures for the first time. Taking centuries to develop the techniques we now take for granted. The Sumerian's

invented the first true written language around 3000 B.C. Their civilization flourished thanks to their ability to write, and while they were conquered many times each conqueror took the written word with them. So the ability and idea to preserve the spoken word for posterity began to travel throughout the world. And the need for someone with the skills to record that information traveled with it. Due to the complexity of early writing systems scribes held a



Image 3

position of great honour amongst societies. In some civilizations they were even exempt from taxation! In 3100 B.C. the Egyptians began using written hieroglyphs. A pictorial language, each symbol was a representation of an item. In order to create words that were not described by a single symbol, scribes had to combine two or more symbols to get the desired word. Such as

combining the symbol for “sea” with the symbol for “sun”, creating a new word, “season”. The Egyptians are also credited with creating the first major advancement in writing surfaces from the papyrus plant.



Image 5

**Image 4:** Chinese movable types, c. 1300 B.C. This group of carved wood types ranges in size from about 1.25 to 2.5 cm in height.

**Image 5:** Woodblock image of a revolving typecase, c. A.D. 1313. This quaintly stylized illustration shows the revolving case designed to make typesetting more efficient.

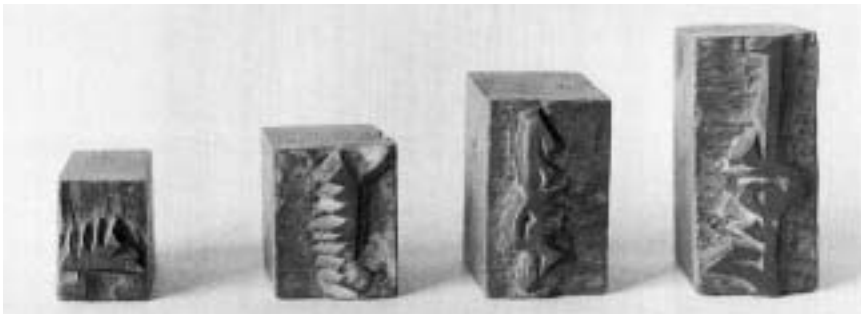


Image 4

## Prehistory

**Image 6:** *The Diamond Sutra*, A.D. 868. A Chinese spiritual text.

**Image 7:** *Dharani* Buddhist charms, c. A.D. 770. Rolled up and inserted in little pagodas, these early specimens of relief printing had the text printed in Chinese calligraphy on one side and in Sanskrit on the other.

With a variety of grades, papyrus was used for everything from royal proclamations to daily accounting. The next step occurred in 105 A.D. with the invention of paper by Ts'ai Lun in China, and then relief printing around 770 A.D. In 1040 A.D. P. Sheng invented the first movable type in Korea, 400 years before Gutenberg would use movable type in his presses.



Image 7



Image 6

### Renaissance

The Renaissance brought about great changes in European society, and graphic design was one of those areas that experienced a great revival. Illuminated manuscripts are handwritten books that were decorated and illustrated from the late Roman Empire until around 1450. These books



Image 8

were produced on parchment or vellum, which was created by treating the skins of animals. These books were in such demand that the time it took a scribe to write a simple two hundred page book caused a great shortage in supply. With four to five months of labour per book, typography soon emerged. While the concept of relief printing and movable type had been known for some time, Johann Gutenberg is the first person credited with bringing together all the complex systems necessary to print a typographic book. Gutenberg was a goldsmith by trade and this gave him the skills to create the metal blocks of type used in his press.

Image 8: The *Book of Durrow*, opening page, the Gospel of Saint Mark, c. A.D. 680. Linked into a ligature, an *I* and an *N* become a beautiful form of interlaced threads and coiling spirals.

## Renaissance

Image 9: Page from the *Ormesby Psalter*, c. early 1300s A.D.

Composed of red and blue inks the decoration, illustration, and initials are joined into a single complex text frame.

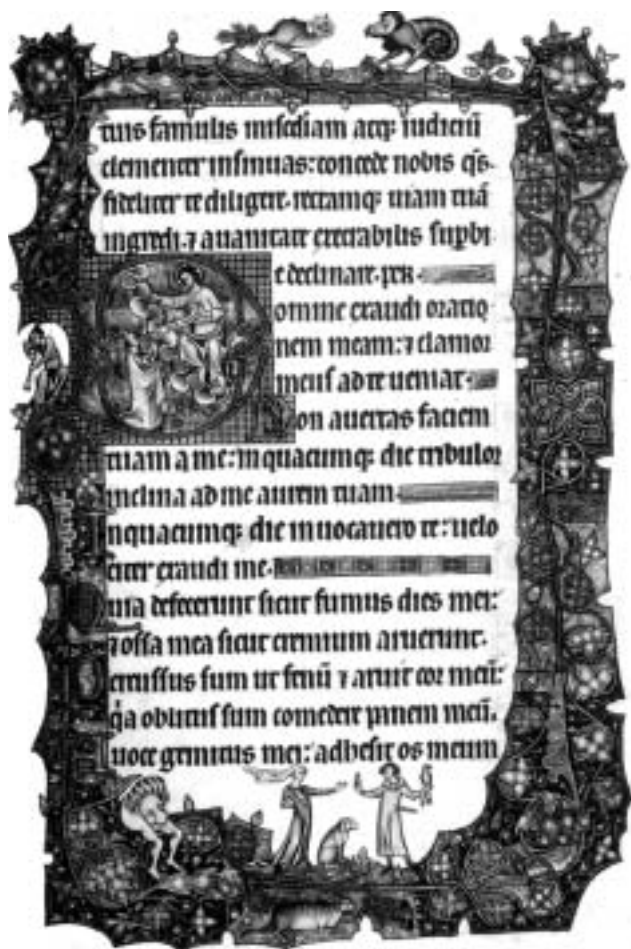


Image 9



Image 10: The *Lindisfarne Gospels*, carpet page facing the opening of Saint Matthew, c. A.D. 698. A mathematical grid helps bring structure to the contours and swirls.

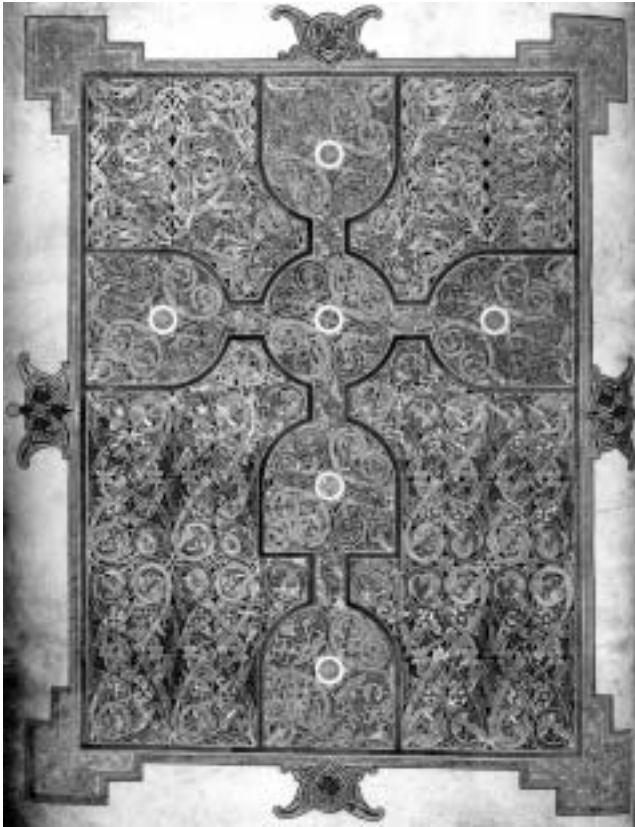


Image 10

## Renaissance

Image 11: These early-nineteenth-century engravings illustrate Gutenberg's system for casting type. A steel punch is used to stamp an impression of the letterform into a softer brass matrix. After the matrix is slipped into the bottom of the two-part type mold, the mold is filled with the molten lead alloy to cast a piece of type. After the lead alloy cools, the type mold is opened and the type is removed.

A. Punch.

B. Matrix

C. Type Mold (with matrix removed to show a newly cast *H*)

D. & E. Type Mold (opened so that the newly cast *H* can be removed)

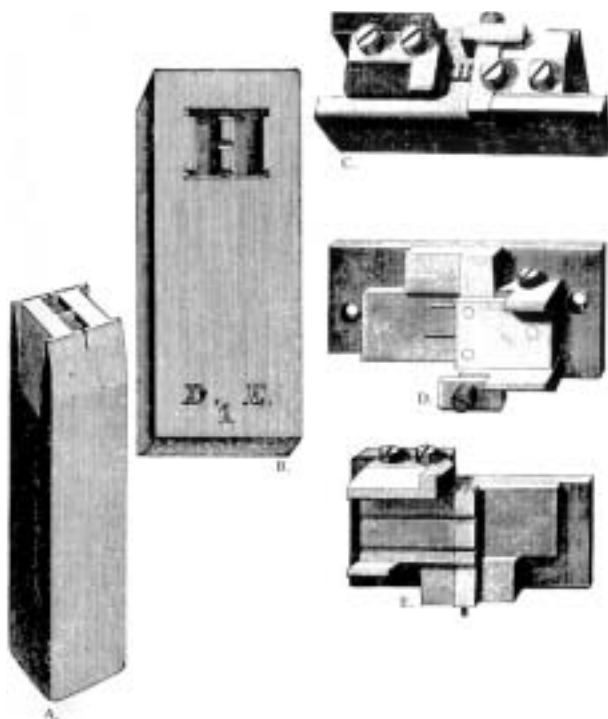


Image 11

**Image 12: Woodcut illustrations for Jost Amman's *Book of Trades*. The occupations of the graphic arts are shown here.**



**A.** The parchment maker is shown scraping animal skins to produce a smooth surface.

**B.** The papermaker lifts his mold out of the vat as he forms each sheet by hand.

**C.** The typefounder is depicted pouring the melted lead into the type mold to cast a character.

**D.** One printer is shown removing a newly printed sheet from the press while the other one inks the type.

**E.** The designer is drawing an image for an engraving.

**F.** The woodblock cutter cuts the drawings.

**G.** The illuminator applies colour and gold leaf to the manuscript.

**H.** Bookbinders are collating pages and applying the cover.

**Image 12**

**Image 13:** Geoffroy Tory, construction of the letter *Q* from *Champ Fleury*, 1529. Tory used five compass centres in his effort to construct a geometrically ideal roman *O*, and he used an additional two compass centres to add a tail for the *Q*.

**Image 14:** Geoffroy Tory, fantastic alphabet from *Champ Fleury*, 1529. It included this whimsical sequence of letterforms composed of tools. *A* is a compass, *B* is a fusy (steel used to strike a flint), and *C* is a handle.

With the creation of Gutenberg's press and the Renaissance's demand for intellectual growth, the fields of graphic design exploded.

With the printer, type designer, author, and artist working together in close collaboration many written works were created that are still admired today. The 1700's brought about a stunning growth in

typography. With thousands of new fonts being developed for the needs of a wide variety of people. With graphic design centres now in France and England there were fonts for every need. From fanciful and delicate to strong and crisp. Many of the fonts created during this time are still in regular use today.

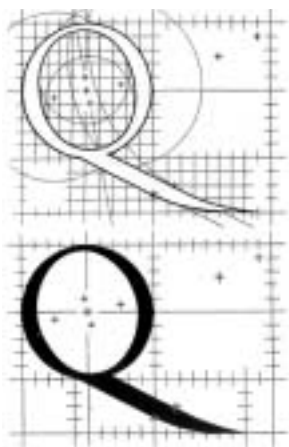


Image 13



Image 14

### Industrial Age

The Industrial Revolution brought about high speed printing presses which initially doubled the output of a typical hand press. With the invention of the Linotype by Ottmar Mergenthaler in 1886 the second problem of having to manually typeset a page was also solved. A typesetter could now simply punch a key and have the



Image 16

correct letter fall into place. With the invention of the

Image 15: Louis Jacques Daguerre, Paris boulevard, 1839. In this early daguerreotype the wagons, carriages, and pedestrians we recorded because the slow exposure could only record stationary objects. On the lower left street corner, a man stopped to have his boots polished and became the first person ever to be photographed.

Image 16: Ottmar Mergenthaler demonstrates the Blower Linotype, the first line-casting keyboard typesetter, to editor Whitelaw Reid on 3 July 1886.



Image 15

## Industrial Age

**Image 17:** Ad for the Kodak camera, c. 1889. George Eastman's camera, simple enough for anyone "who can wind a watch," played a major role in making photography every person's art form.

**Image 18:** Hugh Dubberly, Clement Mok, and Doris Mitch (graphics designers), Apple Computer annual report supplement on Hypercard, 1987. This very early use of hypertext enabled stockholders to navigate the data in an interactive manner.



**Image 17** photo-graphic camera, graphic designers could now incorporate a new level of reality into their work. The war's near the beginning of this century brought out some of the most creative work in the graphic arts. With the conclusion of the second world war, the

technological advancements developed for warfare were put to new uses in industries. Graphic design tentatively began to adopt some of the new technology available to them. In the 1960's pioneering work was being done at MIT and other institutions in the realm of computer engineering. In the early 1980's that work came to fruition with the introduction of the Apple Macintosh.



**Image 18**

While not the first computer to be used in the graphic design field, its ease of use and relatively inexpensive cost allowed many users to become desktop publishers. Producing newsletters and other printed material from their homes this revolution proved infectious to more traditional design houses. Until today, when one designer does the work that once took dozens of skilled tradesmen to accomplish. Perhaps in the near future that one designer, working wherever is convenient, will send a completed job to be printed without the use of any plates, and we will leave the last of Gutenberg's legacy behind us.



Image 19

Image 19: Cover for *Emigre 10* magazine, 1989. Traditional typographic rules yielded to an experiment in unconventional sequencing for a special issue about a graphic design exchange between the Cranbrook and Dutch designers.

### Bibliography

Meggs, Philip B. A History of Graphic Design, New York, New York: John Wiley, c1998.

Thompson, Bradbury. The Art of Graphic Design, New Haven, Conn.: Yale University Press, 1988.

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