

- Pictograph or pictogram —

 a pictorial symbol for a word or phrase;
 representational. Cave drawings are pictographs.
- Ideograph or ideogram —

 a written character symbolizing the idea
 of a thing but not how the word sounds;
 may or may not be representational.

 Chinese characters are ideographs
- Alphabet a set of symbols used to represent the basic sounds of a language
- Logogram a written character or symbol representing a word or phrase, such as those used in shorthand (@) or texting (LOL)

Storytelling to pictographs, 40,000 BC

- For most of history, man has passed on information through story telling, but this is not a reliable way of conveying information, as anyone who has played "telephone" or tried to talk someone through a difficult computer problem can attest.
- The earliest way to record stories were through drawings and paintings, called "pictographs," the earliest examples of which have been found in caves and date from 40,000 10,000 BC.
- A pictograph conveys its meaning through its pictorial resemblance to a physical object. Cave drawings presented people, places and things in a simple, easy to understand way.

The earliest known cave paintings (found in France) date from 32,000 BC.

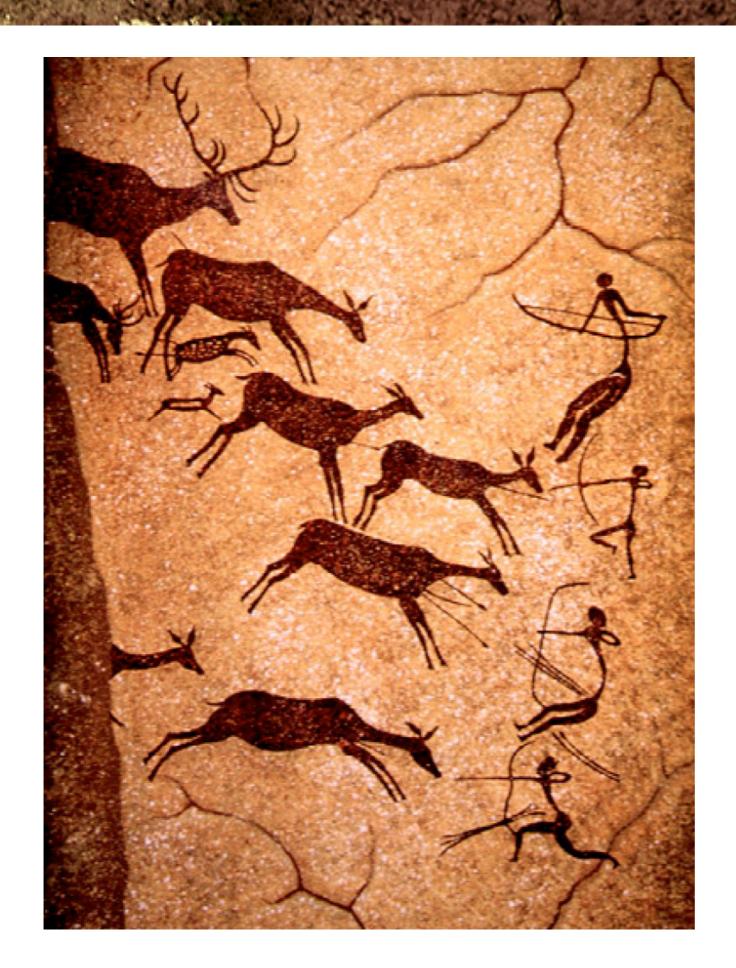


Cave art portrays human hands, large numbers of animals in different activities, geometric figures and signs.



They portrayed prehistoric animals...

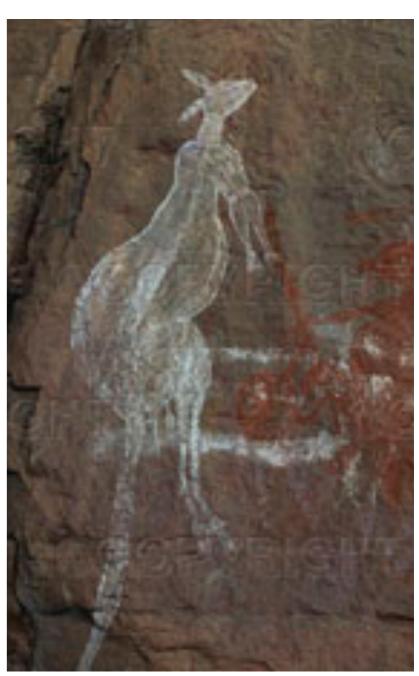




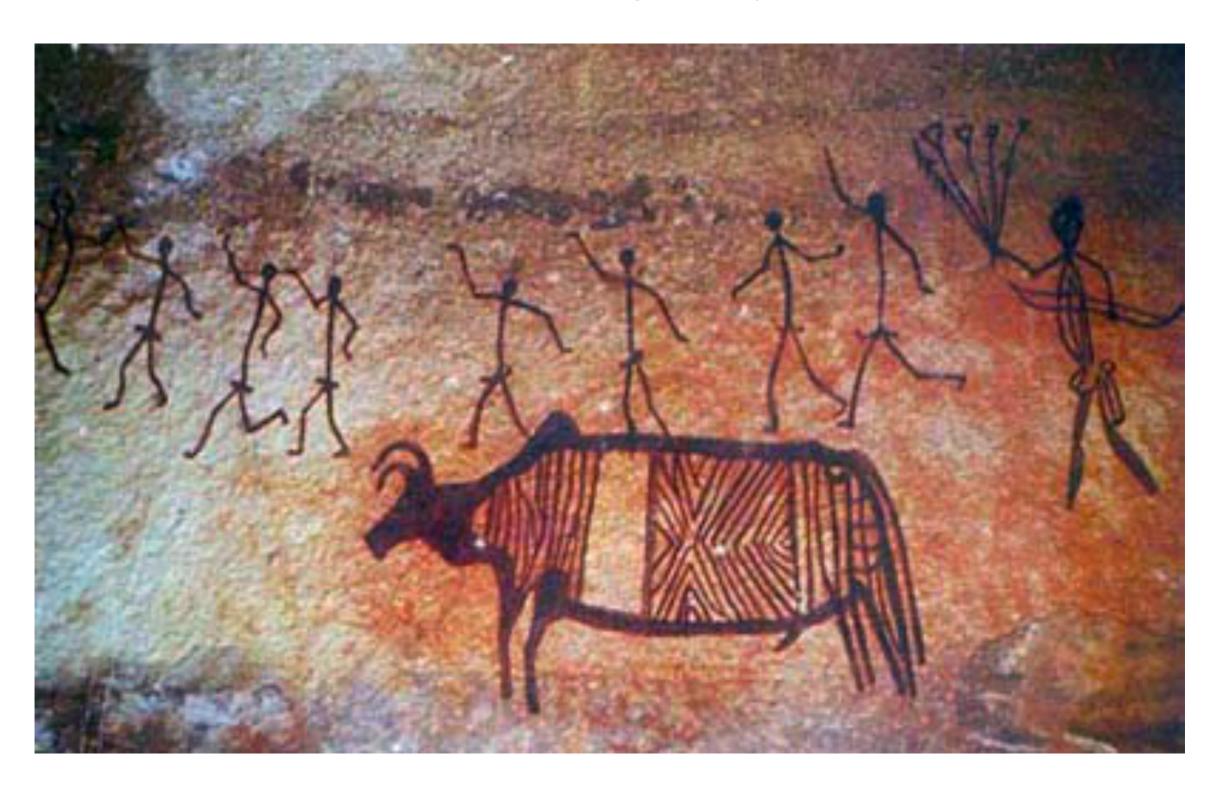
...and the hunt.

Aboriginal cave paintings





Indian cave paintings



Indian cave paintings included people and animals in domestic situations



And Anasazi pictographs from Arizona and New Mexico





Hieroglyphics

The first hieroglyphics appeared about 3,400 BC on pottery in Egypt. Originally they were pictographs, like this one of a cat.



Hieroglyphics incorporate ideographs, 3100 BC

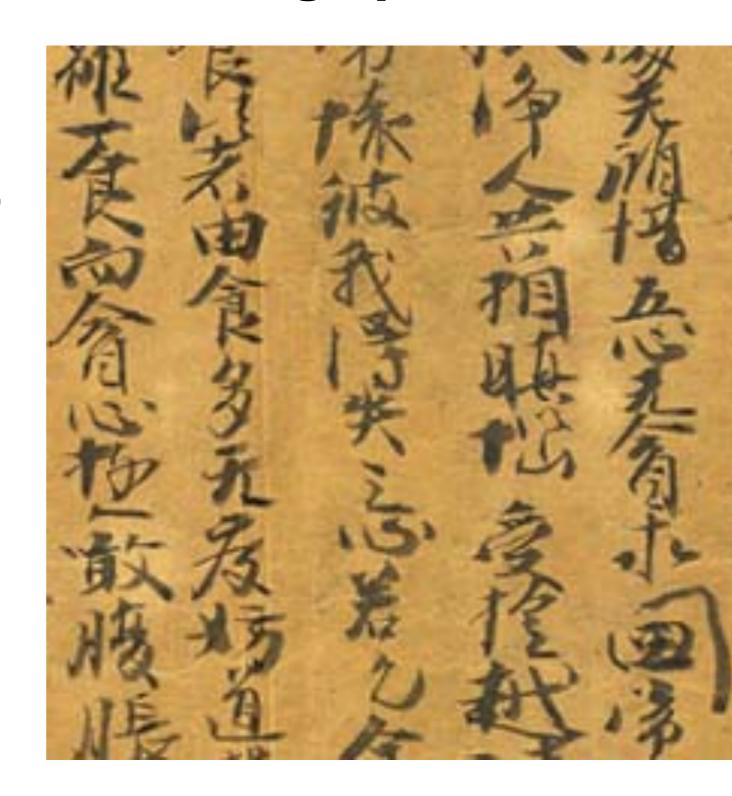
- By 3100 B.C. Egyptian
 hieroglyphics used symbols to
 present thoughts or ideas—
 called "ideographs"— allowing
 for more abstract concepts than
 the more literal pictograms.
- A symbol for an ox could mean food, for example, or the symbol of a setting sun combined with the symbol for a man could communicate old age or death.

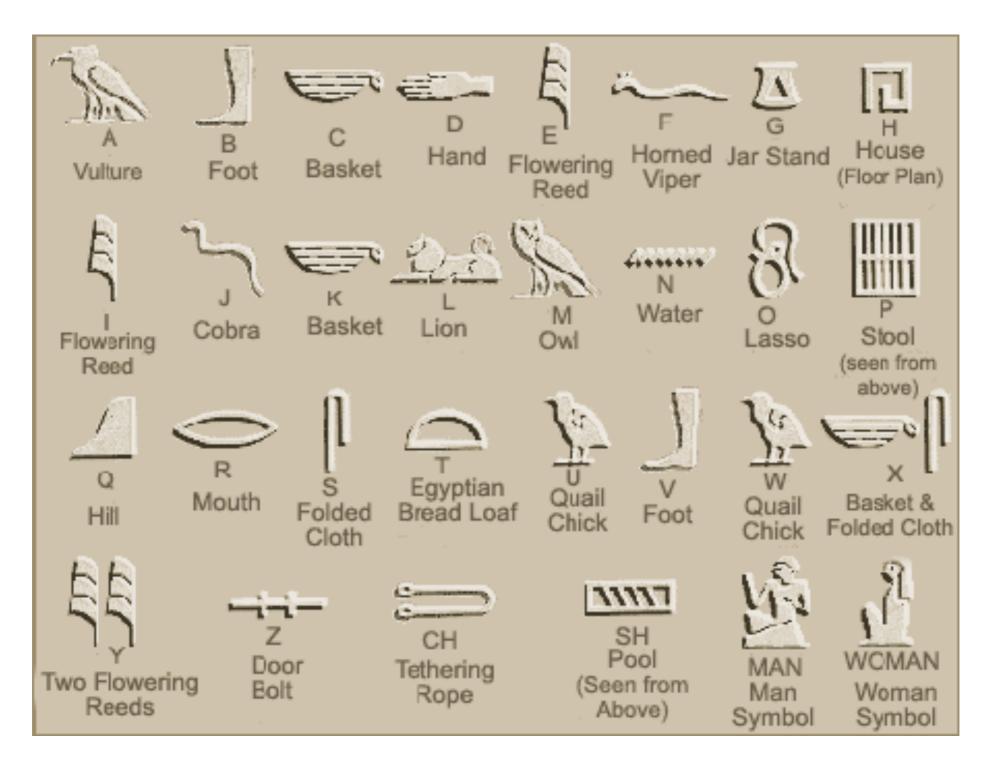


Egyptian ideograph for "weeping"

Hieroglyphics become ideographs

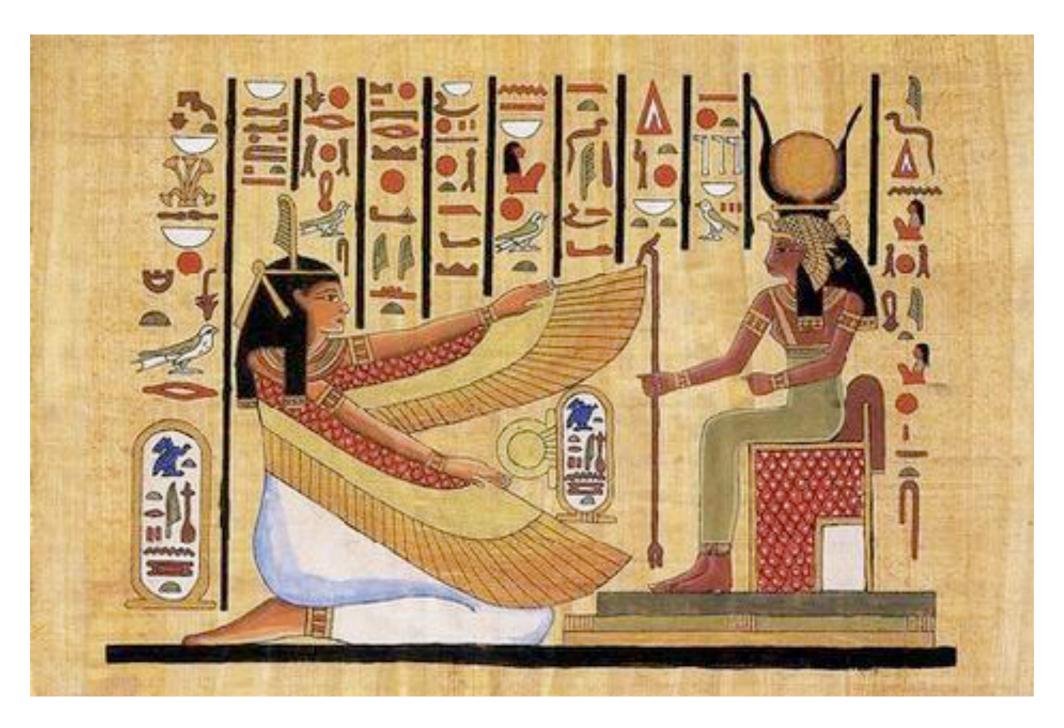
- Ideographs are a graphic symbol that represents an idea or concept. For instance, a symbol of a star represents the heavens or a peace pipe represents peace.
- Egyptians, Native Americans and Asians are people who used ideographs.
- Chinese alphabets are still based on ideographs. Logos are also ideographs.





Egyptian hieroglyphics were a combination of pictograms, ideograms, and phonetic sounds. They had no written characters representing vowels.

Hieroglyphics in use



Eventually there were over 750 hieroglyphs.

Blau Monument from around 3100 BC



Writing also developed in other parts of the Mediterranean. This is one of two stone tablets from southern Iraq during the Late Prehistoric period that may have recorded a land sale using both symbols and pictures.

Cuneiform



Cuneiform, created in Sumaria (southern Iraq) around 3000 BC, was one of the first systems of writing to read from left to right.

At this stage the pictograms were "drawn" rather than "written".

A pointed stylus was used to draw the curved lines of the pictographs, but drawing a curved line on wet clay is not as easy as it sounds, and it leaves granulated ridges on either side of the line.

(The indents at the top here represent numbers.)

http://sumarianshakespeare.com/30301.html



When the Sumarians started making their signs more linear and abstract, they cut river reeds into a triangular profile and used it to impress a line in the clay rather than dragging it across the surface, creating a wedge-shaped mark. (from Latin *cuneus* 'wedge')

At first the Sumarians made a sign for every object, but around 700 symbols decided this was impractical. Abandoning their pictographic style, they began to create words phonetically, combining signs with the desired pronunciation for each syllable (think cat-a-log). This makes it the first written language.

http://sumarianshakespeare.com/30301.html, https://www.ancient.eu/Egyptian Hieroglyphs/

Proto-Sinaitic alphabet, 1700 BC

- It is thought that around 1700 BC Sinai (a wedge-shaped peninsula east of Egypt) was conquered by Egypt for its turquoise mines and trade routes. The local West-Semitic-speaking population adopted a small number of hieroglyphic signs (probably no more than 22) to write their language.
- Egyptian hieroglyphs had phonetic signs, but the Sinaitic people did not adopt those phonetic signs. Instead, they chose pictorial Egyptian glyphs (like ox-head, house, etc) that sounded like the consonants they wanted to represent.
- Proto-Canaanite, also known as Proto-Sinaitic, is the first alphabet, and evolved into the Roman alphabet. (The Egyptians didn't adopt an alphabet until the 2nd Century BC.)

Pictograms evolved into the letters of the alphabet



4

A



Early symbol for "ox"

Phoenician "aleph"

Greek "A"

Roman "A"

Much as our own handwriting starts out blocky and stiff when we are young and becomes fluid and scrawled as we practice, pictograms changed and evolved through use.

Phoenicians, 1000 BC

- A non-pictographic consonantal alphabet, referred to as abjad.
- Developed to serve the needs of sailor/traders.
 One of the most widely used writing systems.
- Assimilated by many other cultures they traded with, including Greek, Hebrew and Arabic.
- Characters became less representational and more symbolic.

	Proto- Canaanite	Early Phoenician	Greek		Proto- Canaanite	Early Phoenician	Greek
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w	~	>	Y	p		7	П
Z	Ш	Ι	Z	s.	\rightarrow	7	\leq
þ	Н		Н	q	80	θ	-0
ţ		\otimes	Θ	r	Œ	∇	P
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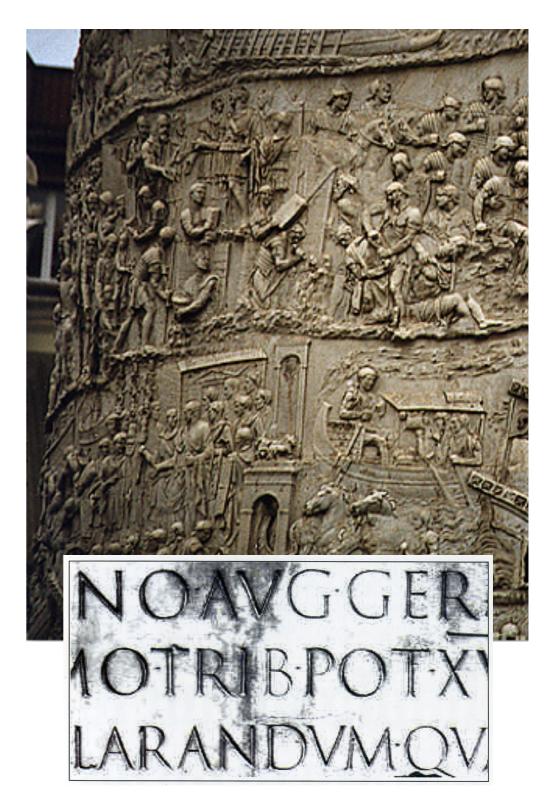
The Greeks create modern alphabet, 900 BC

- Phoenician was a language originally spoken in the coastal region called Canaan (areas where spoken include modern-day Lebanon, coastal Syria, northern Israel, Tunisia, Algeria and Malta). They traded all over the Mediterranean, taking the alphabet with them to use to keep track of what they were trading.
- The Greeks adopted and refined the Phoenician alphabet by adding the first vowels (5 of them).
- Written Greek did not have punctuation, lower case letters or spaces between words.
- "Typography" derives its origin from the Greek words $\tau \dot{\nu}\pi o \varsigma$ typos = "That by which something is symbolized or figured ..." and "to strike" and $\gamma \rho \alpha \phi \dot{\iota} \alpha$ graphia = "to write".

The Greek writing system employed boustrophedon (meaning "as the ox plows"), a system where one reads alternately from left to right on one line and right to left on the next. Notice how the letters are reversed from one line to another.

The Romans refined the Greek alphabet, 600 BC

- It is generally believed that the Romans adopted the Cumae alphabet, a variant of the Greek alphabet, from Cumae, a Greek colony in Southern Italy.
- Romans developed the alphabet further by adding more letters and it advanced rapidly to the modern alphabet. (Roman scribes also began joining and slanting letters in harmony with the natural motion of the hand.)
- Trajan's column in Rome, I I3 AD, still stands as one of the most beautiful examples of Roman letterforms. (See the font 'Trajan' on your Mac.)



Refinements of the alphabet

About 732 AD, Emperor Charlemagne, uniter of Europe, ordered the creation of a system of writing called the Carolingian Miniscule, the first lowercase letters that were more than just a small version of uppercase letters.





The roots of modern typography

- Modern typography traces its roots to the first punches and dies used to make seals and coins in ancient times.
- Though their purpose isn't understood, the first known moveable type artifact is probably the Phaistos Disc.
 Separate punches were used to imprint the disc sometime between 1850 BC and 1600 BC.



Moveable type invented

- China invents moveable type in the 11th century, but restricted by the thousands of characters required to use it.
- In 1439, Johannes Gutenberg invents a system of moveable type that revolutionizes the world by allowing mass printing of written material accidentally bringing on, among other things, the Protestant Reformation and the Renaissance.
- Gutenberg developed an ingenious process employing a separate hard metal matrix, or mold, for each alphabet character, from which soft lead type could be hand-cast in great quantities. He then figured out how to assemble the type into a page of text, which could then be printed on paper using special inks he developed and a printing press of his own design.

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Gutenberg Bible

Completed between 1450 and 1456, the Gutenberg Bible was the first book printed using his inventions. The "Blackletter" font he printed with was based on the regional handwriting style of the scribes his printed books competed with.



Example of Gutenberg's "Blackletter" font



lar regio: 3 doit illi ponttan quotuq veller ire: habes libertate quecuq; facere voluisset. Pergetat ergo per omes qui erant in capmintate: et monita la-lucis dabar eis. Lu autem venillet in rages ciuitatem indeou-et et hijs qui bus honorar fuerat a rege habuillet decem talenta argenti: 4 cum i multa nırta generia lui gabdü egentê videret qui erat eg mibu eius: lub arographo dedit illi memoratu pondus argenti. Post multi vero téporis mortuo salmanasar rege-cüreguaret sennacherib filius eius peo-a filios ilriegolos haberet in colpedu luo: tobias pergebat per omem rognatione lua-4 cons solabatur eos:dinidebatq; unituiq; prout metat de facultachus fuis. E

Hopetown-Young Gutenberg Bible, Cambridge University

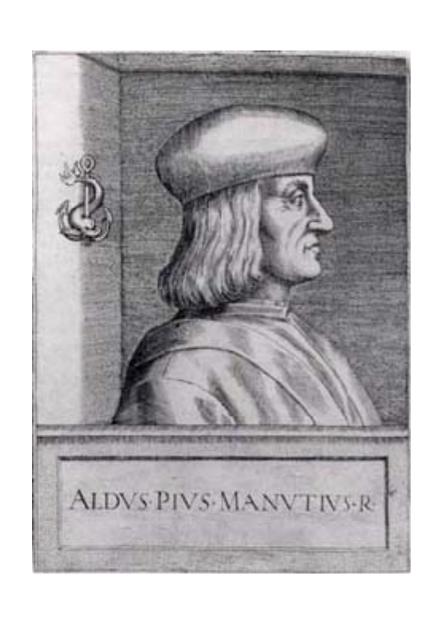
The "Illuminated" initial cap was not printed; a space was left and it was added by hand.

First "Roman" typeface

Within 15 years of the invention of printing, Frenchman Nicolas Jenson designs and begins printing the first "Roman" font in Venice, Italy, 1470. Jenson construct his typeface on the basis of typographic principles, rather than copying manuscript samples.

Quidá eius libros no ipfius esse sed Dionysii & Zophiri co lophonioru tradunt: qui iocadi causa coscribentes ei ut dis ponere idoneo dederunt. Fuerunt auté Menippi sex. Prius qui de lydis scripsit: Xanthuq; breuiauit. Secudus hic ipse. Tertius stratonicus sophista. Quartus sculptor. Quintus & sextus pictores: utrosq; memorat apollodorus. Cynici au tem uolumina tredeci sunt. Neniæ: testamenta: epistolæ co positæ ex deorum psona ad physicos & mathematicos gramaticosq; & epicuri sextus: & eas quæ ab ipsis religiose coluntur imagines: & alia.

Explosion of printing

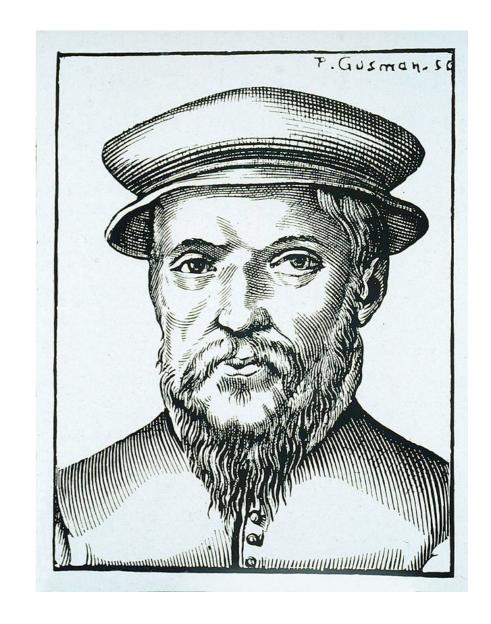


- The first fifty years witnessed an explosion of printing throughout Europe, and by 1500 more than 10 million copies of nearly 3500 works were printed and distributed.
- In 1500, an Italian printer, Aldus Manutius, invented the concept of the pocket or portable book.
- He also created the italic typeface design, for which he obtained a patent, though the honor is due more to his punchcutter, Francesco Griffo.

Garamond

 The I500s brings the beautiful proportions of French type designers Claude Garamond and Robert Granjon. (Below, Adobe Garamond.)

ABCDEFGHIJ KLMNOPQRS TUVWXYZ abcdefghijklmn opqrstuvwxyz 1234567890



Caslon

1716-1728 brings the transitional roman typeface of William Caslon thins are thinner, uniform serifs, more upright stresses.

ASPECIMEN

By WILLIAM CASLON, Letter-Founder, in Chifwell-Street, LONDON.

ABCDEFGHI ABCDEFGHIJK ABCDEFGHIJKL bis vigilias, sibil timor populi, sibil conABCDEFGHIJKL MNOPQRS ABCDEFGHIJKLMNOPQR ABCDEFGHIKLMN

Quousque tandem abutere, Catilina, pati-

Quousque tandem ubusere, Cacilina,

patientia nostra?

Two Lines Great Printers.

Quoufque tandem abutere, Catilina, patientia nostra? quamdiu nos etiam Quousque tandem abutere, Catilina, patientia nostra? quamdiu nos etiam furor

Quoufque tandem abutere, Catilina, patientia nostra? quamdiu nos eriam furor ifte tuus elu-

Quousque tandem abutere, Cati- Quonfque tandem abutere, Catili-

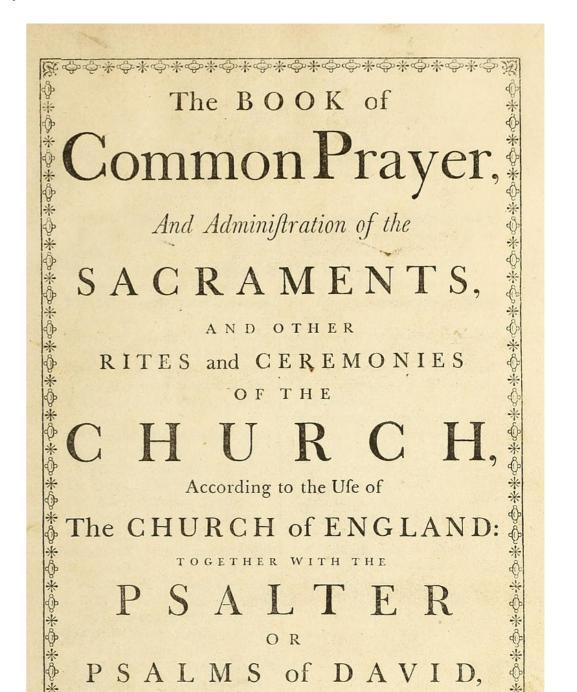
lina, patientia noltra? quamdiu na, patientia milira? quamdiu tius as. et a man de tiet to mine et nos etiam furor ille tuus cludet? ms etiam furor ille tuus cludet? ms etiam furor ille tuus cludet? quem ad finem fese effrenata jac- quem ad finem sese effrenata jac-ABCDEFGHJIKLMNOP ABCDEFGHJIKLMNO

ABCDEFGHIJ **KLMNOPQRS** TUVWXYZ abcdefghijklmn opqrstuvwxyz 1234567890

Baskerville

Baskerville is a serif typeface designed in the 1750s by John Baskerville (1706–1775) in Birmingham, England. It had so much more contrast than previous fonts that people claimed it blinded them.

ABCDEFGHIJ KLMNOPQRS **TUVWXY** abcdefghijklmn opqrstuvwxyz 1234567890



Bodoni

 1791 Giambattista Bodoni creates the first "modern" serif typeface, Bodoni, with its ruled serifs and extreme contrast. A similar and often preferred version is Didot.



ABCDEFGHIJ KLNOPQRS TUVWXYZ abcdefghijklmn opqrstuvwxyz 1234567890

Fat Face

abedeigh ijklmnopq rstuvwxyz ABCDEFG **OPQRSTU**

As the Industrial Revolution took hold, more people were living in cities, and more was being printed. So, with calls from the printers for something more "visible," type designers created bolder type. First came "Fat Face," around 1810, an exaggeration of Bodoni. (Bodoni Ultra, left)

Egyptian (Slab Serif)

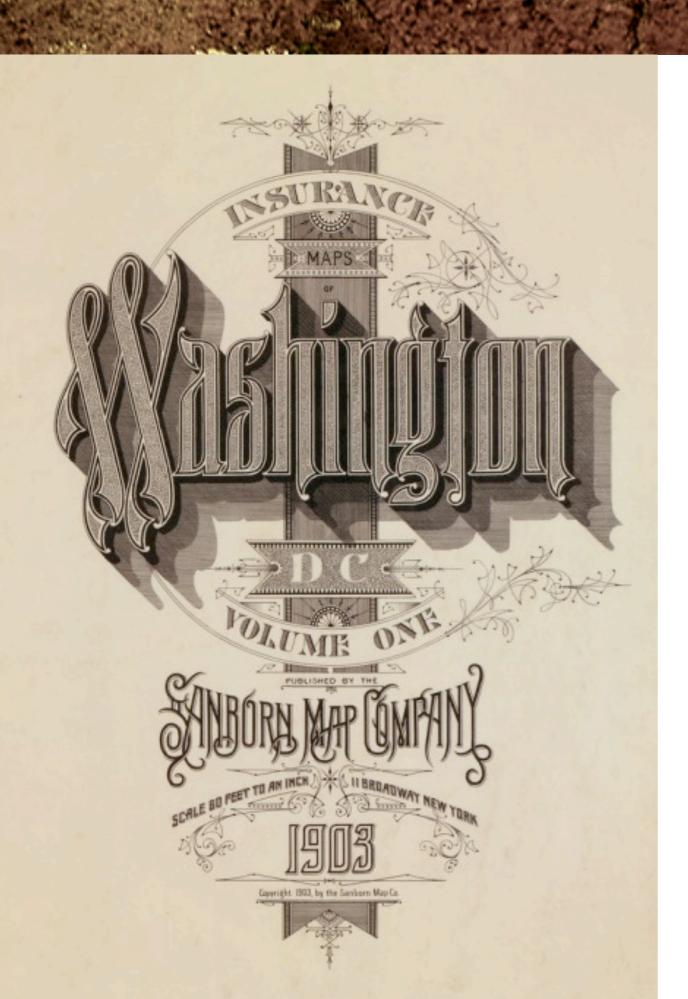
ABCDEFG HIJKLNOP QRSTUVW XYZ1234 567890

Next, both the strokes and the serifs were fattened. Why call it Egyptian? Upon Napoleon's return from a three-year Egyptian expedition and publication in 1809 of his Description de l'Égypt, Egypt was all the rage, and type founders simply used a term that was in vogue. (Vincent Figgins, Figgins Antique, 1817)

Victorian Era

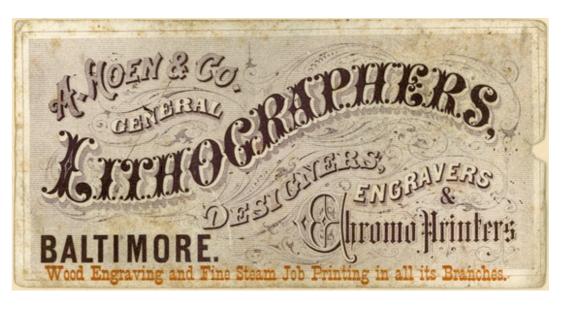


Here's a sample of a Victorian-era poster, mixing a variety of bold fonts including Fat Face, Egyptian and Blackletter styles.



Victorian Engraving

From the mid-1800s to the early 1900s engravers illustrated type by hand on steel and copper plates. Freehand work like this allowed for highly elaborate designs, including drop shadows, strokes, inlines, etc.



Sans Serif



- In 1816, William Caslon IV produces a font specimen book listing a "sans serif" all caps with no lower case (left). Not much is known about it and no examples of it in use exist.
- The first popular sans serif was
 Accidenz-Grotesk, created
 for the AG typefoundry in 1896,
 the beginning of the modern era.

abcdefgh ijklmnopq rstuvwxyz **ABCDEFG** HIJKLMNO **PQRSTUV WXYZ**

abcdefgh ijklmnopq rstuvwxyz **ABCDEFG** HIJKLMNO **PQRSTUV WXYZ**

Berthold Akzidenz Grotesk (1896)

Linotype Helvetica (1957)

Geometric Sans Serif

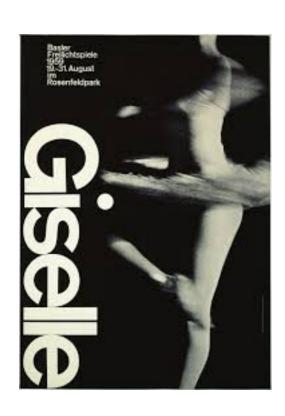
ABCDEFGHIJ KLNOPQRS TUVWXYZ abcdefghijklmn opqrstuvwxvz 123456/89

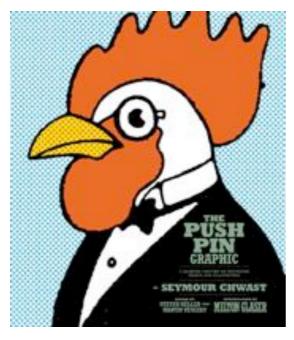
Futura, 1927, is a sans-serif typeface designed by Paul Renner. Based on geometric shapes, it became representative of the Bauhaus design style of 1919-1933. Although Renner was not associated with the Bauhaus, he believed that a modern typeface should express modern models, rather than be a revival of a previous design. The typeface is derived from near-perfect circles, triangles and squares and is based on strokes of near-even weight, which are low in contrast.

Near history

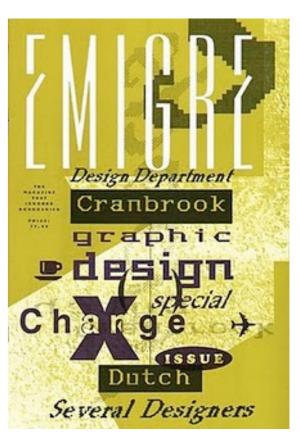
Those are the basic styles — Oldstyle Serif, Transitional Serif, Modern Serif, Egyptian, and Sans Serif.

But there are always new sub-styles being created, and old styles changing and evolving. Here are some recent examples.













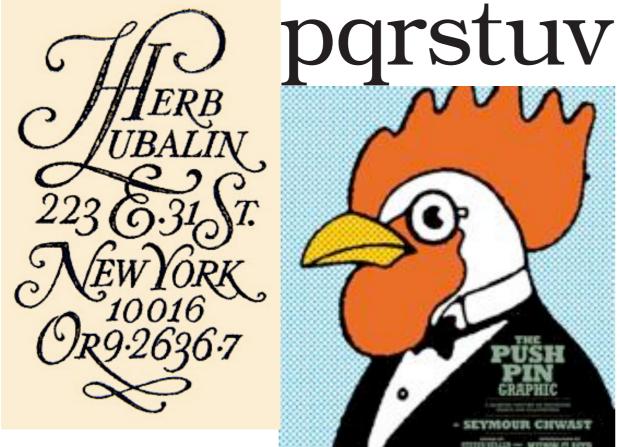


Combining styles of Russian Constructivism, DeStijl, and the Bauhaus, Swiss designers in the 1950s-1960s create stunning designs with neutral elements like the grid, sans serif typography, and photography, in an attempt to bring science and rationality to graphic design. (Josef Müller-Brockmann, Massimo Vignelli, Wim Crouwel)

(Univers, first systematic font family, 1957, Adrian Frutiger)

Vernacular Design

ABCDEFGH
IJKLNOPQR
STUVWXYZ
abcdefghijkl

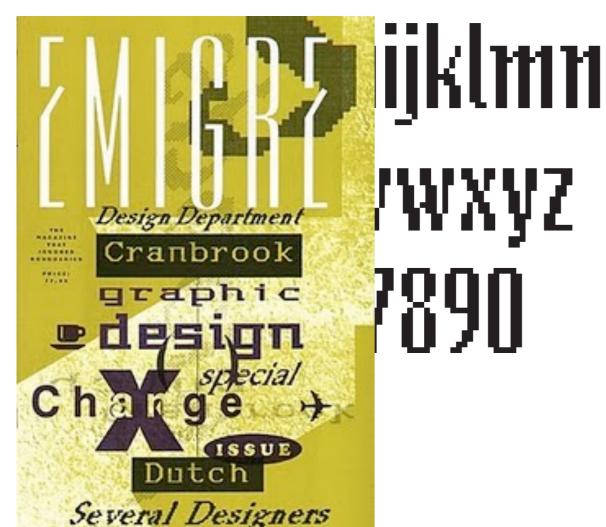


The opposite of Swiss design, vernacular design emerged with the founding of Push Pin Studios in New York in 1954 by Milton Glaser and Seymour Chwast, who revived historical design styles and improved and adapted them. Other designers from the 1950s-70s included Peter Max, Lou Dorfsman at CBS and letterers Ed Benguait, and Herb Lubalin. Design style revivals continue to be popular.

(left: ITC Bookman, 1975, Ed Benguiat)

Macintosh & Emigre Magazine

ABCDEFGHIJKLN OPQRSTUVWXYZ



In 1984, Emigre magazine was one of the first publications to use computers and was a huge influence on graphic designers moving into desktop publishing. Zuzana Licko used the newly invented Macintosh and a bitmap font tool to create fonts that defined the decade. Her ascendance in a primarily maledominated profession and her bypassing of traditional training have been an inspiration to a generation of font designers. (left: font OaklandFifTeen, 1985,

(left: font OaklandFifTeen, 1985, Zuzana Licko)

Grunge fonts

ABCDEFGHIKLN OPQRSTUVWXYZ



hijklmno IVWXYZ 67890

Originally, "punk" typography was created by ripping up or crumpling photocopied type over and over again. Then, around 1994, House Industries put out a font collection called "Flyer Fonts," a collection of "distressed" fonts created mostly through their own over-enthusiastic copy machine use. The availability of these fonts ushered in the "grunge" era. Now angry fonts like these are so mainstream that "Crackhouse" (left, 1994, Jeremy Dean) is included with the Macintosh operating system.

An explosion of technology

- The development of steam-powered presses in the 18th century created the newspaper and magazine industries.
- The late nineteenth century brought improvements in typesetting equipment, such as the Linotype (automated hotmetal typesetting — created in Baltimore). The late twentieth century brought photo type, computerized typesetting, and then computerized typesetting on our desks and laptops.
- The digital age has seen an explosion of typographic design. There are more type designers now than have ever lived.
- Short term: Be aware of what historical styles are and how to use them appropriately. Own a small number of versatile font families and learn to use them well. Long-term: Be aware of changes in styles and be open to new styles as they develop.

