



A History of Typography

L A Packer 2007

I cdnuolt blveiee that I cluod aulacly usdnatnrd
what I was rdanieg The phaonmneal pweor of the
human mind Aoccdrnig to a rscheearch at
Cmabrigde Uinervtisy, it deosn't mttar in what
order the ltteers in a word are, the only iprmoatnt
thing is that the frist and lsat ltteer be in the rghit
pclae. The rset can be a taotl mses and you can still
raed it wouthit a porbelm. This is bcuseae the
human mind deos not raed ervey lteter by istlef, but
the word as a wlohe. Amzanig huh? Yaeh and I
awlyas thought slpeling was ipmorantt.

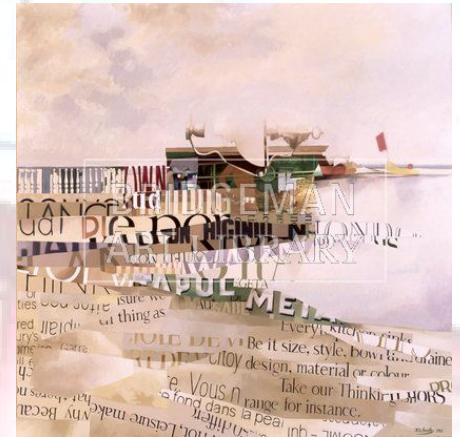
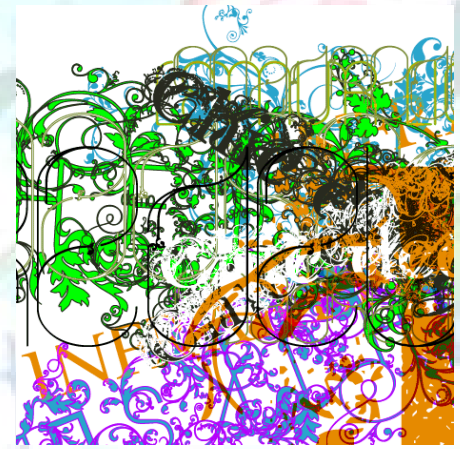
What is Typography?

EDDY'S BONES **PLANK** *Cracked*
CREEPY *Blur* **CHOCOLATE**
COFFEE SACK **FLOWER** **POWER**
Cathedral **GAUSS** **RUBBER STAMP**
celtic **SPIKE** **Beau** *Amaze*
Borghs **Cracked** **Southwestern**
ELIZABETH **Wright** *Bart* **BIG NIB**
FANZEE **Oak Ridge** **NEW YORK**
Lauren **DECO** *Parisian* **Crane**
FATSO **DEVON** **NATIVE**
Catchup **Expose** **Heidleberg**
IRONWORK **ASIA** **TEMPLETT**
Cocoa **Billboard** **DAVIS**
GREMLIN **Brando** **EXPEL**

Typography is the art and techniques of type design, modifying type glyphs (type characters) and arranging type.

Type glyphs are created and modified using a variety of illustration, photographic and design techniques.

The arrangement of type is the selection of typefaces, point size, line length, character placement, leading (spacing between lines) and letter spacing.



Type Technology

The First Revolution: Gutenberg (ca. 1450-1480) & The Impact of Printing

Before the printing press, books were produced by scribes, firstly by monks, but by 12th Century lay copiers were serving the university market.

This continued until the invention of movable type, which is mainly attributed to Johannes Gutenberg.

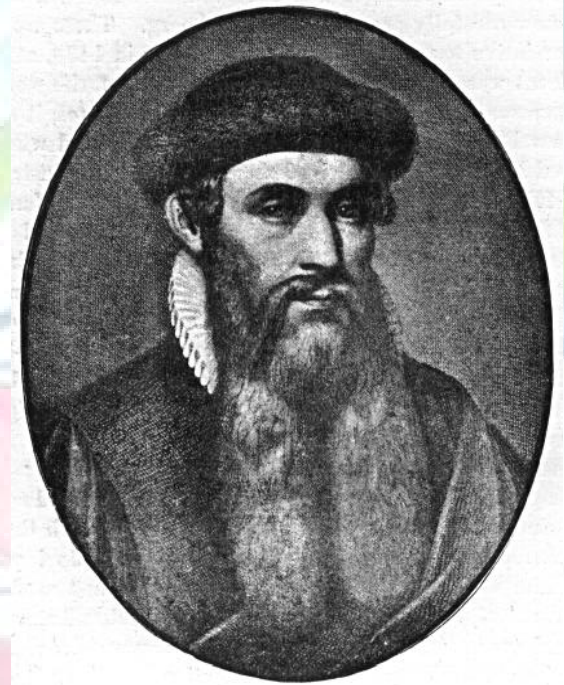
A punch made of steel, with a mirror image of the letter is struck into a piece of softer metal. Molten metal is poured into this, and you get type. The type is put into a matrix to form the page of text, inked, then pressed into paper.

Within several decades typesetting technology spread across Europe with considerable speed. Within the first fifty years, there were over a thousand printers who set up shops in over two hundred European cities. Typical print runs for early books were in the neighbourhood of two hundred to a thousand books.

Some of these first printers were artisans, while others were just people who saw an opportunity for a quick buck. The modern view of a classical era in which craftsmanship predominated appears unjustified to scholars: there has always been fine craft, crass commercialism, and work that combines both.

As you have grown up with so much technology, it will be difficult for you to grasp just how much of a revolution printing was. It was the first mass medium, and allowed for the free spread of ideas in a completely unprecedented fashion. The Protestant Reformation might not have occurred, or might have been crushed, without the ability to quickly create thousands of copies of Luther's Theses for distribution.

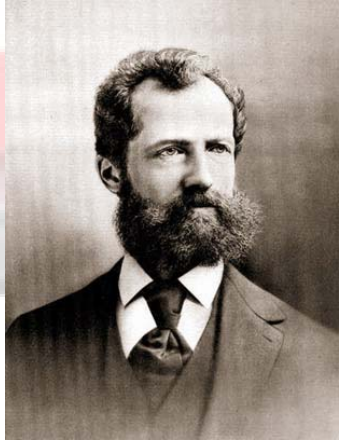
Many groups sought to control this new technology. Scribes fought against the introduction of printing, because it could cost them their livelihoods, and religious (and sometimes secular) authorities sought to control what was printed. Printers would be held responsible rather than authors for the spread of unwanted ideas, and some were even executed. But this was a largely futile struggle, and most such restraints eventually crumbled in the western world.



Johannes Gutenberg

Type Technology

Industrial Revolution: Steam, Line-casting & Automated Punch-cutting (start 1870-95; end 1950-65)



Amazingly, the printing press and the science of typesetting had only minor refinements from the late 1600s to the late 1800s. Towards the end of this period, the industrial revolution brought major innovations in printing technology. Rotary steam presses (steam 1814, rotary 1868) replaced hand-operated ones, doing the same job in 16 per cent of the time; photo-engraving took over from handmade printing plates.

Typesetting itself was transformed by the introduction of line-casting machines, first Ottmar Mergenthaler's Linotype (1889), and then the Monotype machine.

While typesetting and printing speeds increased phenomenally, so did the speed of punchcutting. In 1885, Linn Boyd Benton (then of Benton, Waldo & Company, Milwaukee) invented a pantographic device that automated the previously painstaking process of creating punches. His machine could scale a drawing to the required size, as well as compressing or expanding the characters, and varying the weight slightly to compensate for the larger or smaller size — this last being a crude form of the *optical scaling* done by skilled typographers making versions of the same font for different sizes. In optical scaling, the thickest strokes retain the same relative thickness at any size, but the thinnest strokes are not simply scaled up or down with the rest of the type, but made thicker at small sizes and thinner at large display sizes, so as to provide the best compromise between art and readability.

Also around this time, the "point" measurement system finally reached ascendancy. In the earlier days of printing, different sizes of type had simply been called by different names. Thus, "Brevier" was simply the British name for 8-point type of any style. Unfortunately, these names were not standardised internationally; 8-point type was called "Petit Texte" by the French and "Testino" by the Italians. Such a naming system also allowed wonderful confusion, such as "English" referring both to blackletter type, and a 14-point size; "English English" was thus a 14-point blackletter!

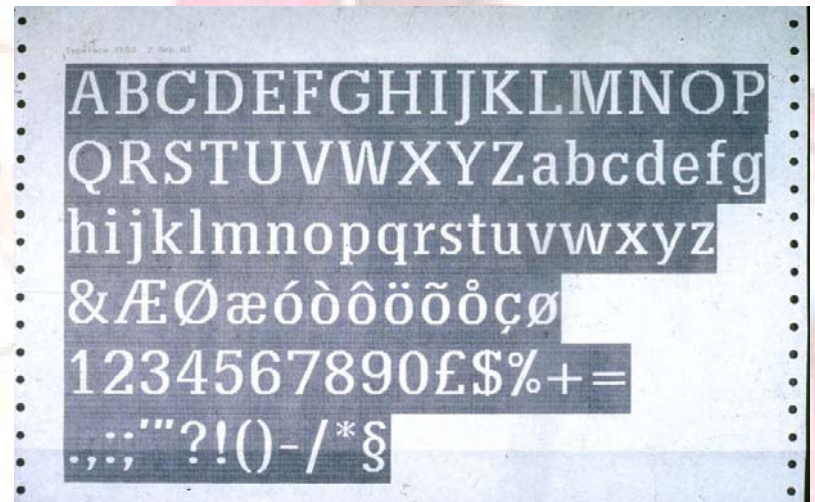
Pierre Simon Fournier had first proposed a comprehensive point system in 1737, with later refinements, but what was ultimately adopted was the later version developed by Francois Ambroise Didot. This put approximately 72 points to the inch (and now exactly 72 points to the inch on most computer-based typesetting systems).



Type Technology

Photocomposition (Intertype et. al. start 1950-60 end 1975-85)

- First photocomposition devices (the French "Photon" and Intertype's Fotosetter) introduces around 1944.
- Typeface masters for photocomposition on film; characters projected onto photo-sensitive paper.
- Lenses used to adjust size of the image, scaling type to desired size.
- New technology was an "improvement," allowing new freedoms, e.g. overlapping characters.
- Negative: eliminated optical scaling due to rush to convert fonts to new format, usually only one design used, directly scaled to the desired size.



Digital Era (start 1973-83 ongoing and constantly developing)

Important facts to consider...

- although typefaces may have come into use at a particular point in time, they often continued in general use far beyond that time.
- even after the rise of old style typefaces in the late 1600s, the blackletter type was commonly used for setting text for several centuries
- the *style* of a given typeface may belong to a quite different period from that of the typeface itself.
- many typefaces have very complex histories: a type could have been originally designed in metal at one time, reworked by someone else later, made into a phototypesetting face by another person, and then later created in digital form by yet another designer — who might have been working off of any of the above as the basis of their work.
- the classification system used (old style, transitional, modern, sans serif, slab serif, etc.) is both simple and widely used, but often the precision and artistic accuracy of this system is perhaps dubious.

‘Blackletter’ Fonts

The first printed types are a good example of what most people think of as medieval or "old English" lettering. Characteristics include ornate capitals, roughly diamond-shaped serifs, and thick lines.

Studies from mid-century found that people can read blackletter with a speed loss of no more than 15%. However, there is more effort involved.

Blackletter is today most appropriate for display or headline purposes, when you want to invoke the feeling of a particular era.

• Engravers' Old English (Bitstream)

The Quick Brown

• Ayres Royal (Wiescher Design)

The Quick

• Collins Old English (Scriptorium)

The Quick Brown Fo

• Rheingold (Scriptorium)

The Quick Brown

• Steel Magnolias (BA Graphics)

The Quick Brown Fo

• Kings (TypeSETit)

The Quick Bro

• Old English (Linotype)

The Quick Brown

• LHF Monogram English (Letterhead Fonts)

The Quick Brown

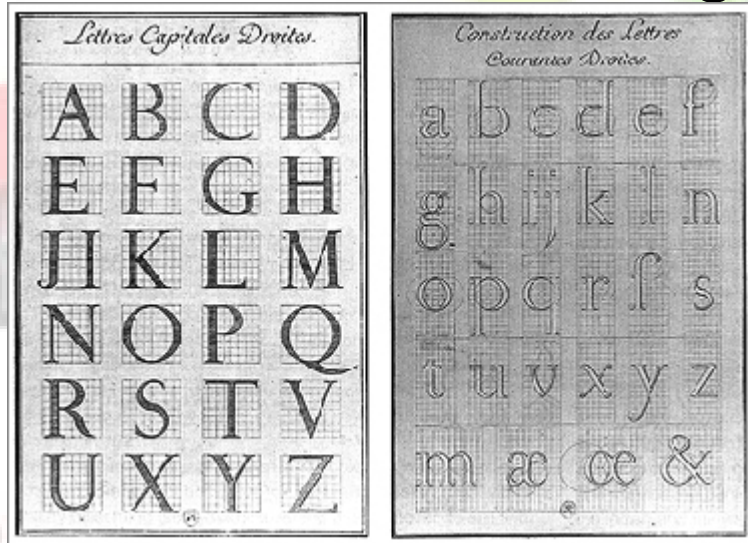
Old Style Typefaces

The Renaissance was typified by an obsession with things "classical," in the Greco-Roman sense, which had major implications for typography. The neo-classical letterforms were somewhat more condensed than the Carolingian shapes, but much rounder and more expanded than the blackletter.

Old style type is generally considered "warm" or friendly, thanks to its origins in Renaissance humanism. The main characteristics of old style typefaces are low contrast with diagonal stress, and cove or "bracketed" serifs (serifs with a rounded join to the stem of the letter). The earliest old style typefaces (originally 15th-16th Century) have very minimal contrast, and a sloped cross-bar on the lower-case "e." One such is Bruce Roger's 'Centaur'. (1916).

The Quick Br

Transitional Type



Romain du Roi

ABCDEFGHIJKLMN
OPQRSTUVWXYZÀ
ÅÉÎÏÕØÜabcdefghijklm
nopqrstuvwxyzàåéîõøü
&1234567890(\$£.,!?)

Fournier circa 1750

"Transitional" type is so-called because of its intermediate position between old style and modern. The distinguishing features of transitional typefaces include vertical stress and slightly higher contrast than old style typefaces, combined with horizontal serifs. The most influential examples are Phillippe Grandjean's "Romain du Roi" for the French Crown around 1702, Pierre Simon Fournier's work circa 1750, and John Baskerville's work from 1757 onwards.

Modern Type

Contrast is accentuated, and serifs are more flattened. Current examples of such are based on originals from approximately 1788-1810, and are dominated by British isles designers, such as Richard Austin (Bell 1788), William Martin (Bulmer) and Miller & Richard (Scotch Roman).

For currently available examples of transitional type, there are many types which bear Baskerville's name, descending from one or another of his designs. Less common today is P.S. Fournier's work, although several versions of it are available in digital or metal form. Although Scotch Roman has been a very common face in metal type usage since Monotype's 1920 revival, it is not a common digital face.

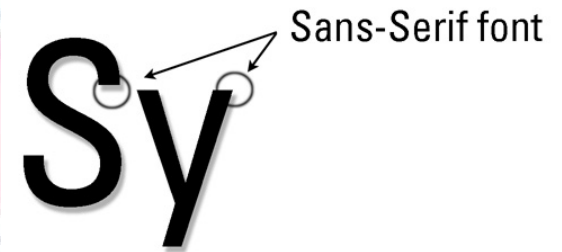
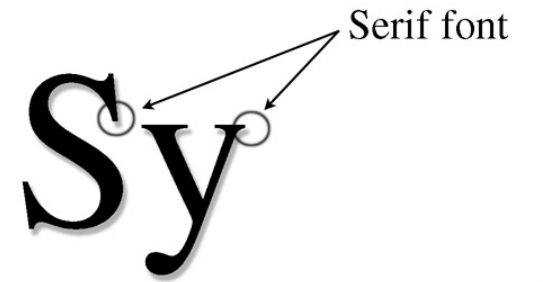
**ABCDEFGHIJK
LMNOPQRSTU
VWXYZÀÁÂÉÊËÜä
a
bcdefghijklmnopq
rstuvwxyzàáâéêëü
&1234567890(\$£.,!?)**

Sans Serif & Slab Serif

These type forms made their first appearances around 1815-1817. Both are marked by simpler letterforms with (usually) relatively uniform stroke weight, lacking significant contrast, often geometric in design.

The earliest forms of sans and slab typefaces tended to be heavy display faces, but quickly evolved into a wide range of styles.

Sans serif letters have no serifs. The low contrast and absence of serifs makes most sans typefaces harder to follow for general reading. They are fine for a sentence, passable for a paragraph, but are difficult to use well in the text of a book.



Hollywood Deco Medium

Honda

Honda Italic

Horatio Light

Humana Sans Medium Italic

Humana Sans Bold

Humana Sans Bold Italic

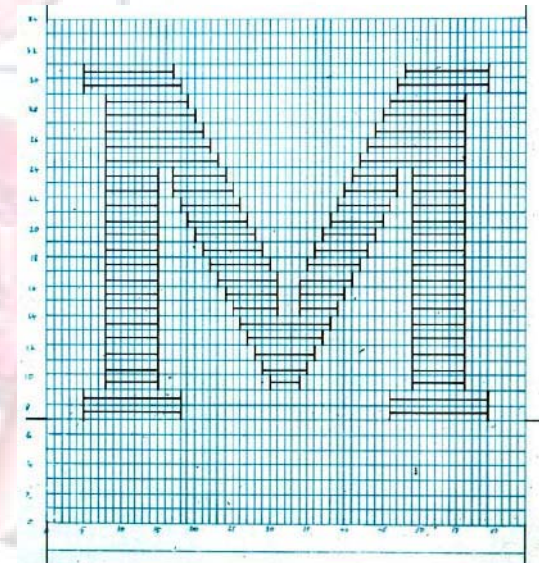
Huxley High Light

Sans Serif & Slab Serif

By far the most common sans is Helvetica (1951, Meidinger) despite being despised by many typographers. It does have the advantage of coming in a huge range of weights and widths, which makes it versatile, and its ubiquitous character makes it easy to match. Other general-purpose sans serifs include Univers (Frutiger, 1952+), Arial (Monotype), Franklin Gothic (M.F. Benton, 1903) and Frutiger (Frutiger, 1975).

Slab Serif - Egyptian

These faces have block-like rectangular serifs, sticking out horizontally or vertically, often the same thickness as the body strokes. There is some debate about the origin of slab serif typefaces: did they originate by somebody adding serifs to a sans face, or were they conceived independently?



Decorative and Display Type

Fat Faces

The "Fat Face" types were an offshoot of the moderns, intended for display purposes (that is, to be attention-getting for use in large sizes, particularly advertising). The first such types appeared from 1810-1820. They further exaggerated the contrast of modern typefaces, with slab-like vertical lines and extra emphasis of any vertical serifs, which often acquired a wedge shape. Bodoni Ultra, Normande and Elephant are all examples of fat face types which are closely based on early to mid-19th Century originals, and are available in digital form.

Elephant Font

ABCDEFGHIJKLMNO
PQRSTUVWXYZÀÂÉÎ
ÏÏÜABCDEFGHIJKL
MNOPQRSTUVWXYZ
&1234567890(\$£.,!?)

Wood Type

Wood type was used for display advertising during the industrial revolution. It derives its name from the fact the type is carved from wood, cut perpendicular to the grain. It has strong contrasts, an overall dark colour, and a lack of fine lines. Many wood types have an "Old West" feel, because they are most strongly associated with America in the 1870-1900 period.

Decorative and Display Type

Art Nouveau (French meaning 'new art')

- late Victorian era, from 1880 to World War I
- characterized by ornamental style of art
- organic, asymmetrical, intricate and flowing lines
- style saw a revival during the 1960s.

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
ÀÁÂÃÄÅËÊËÌÍÎÏÐÏÜäåæçèéêëìíîïðñ
nopqrstuvwxyzàáâãäåæçèéêëìíîïðñ
1234567890(\$%&'()*+,-./:;<=>?@

ABCDEFGHIJKLMNPOQ
RSTUVWXYZabcdefghij
klmnopqrstuvwxyz
1234567890(.,!?"#\$%&€)

Arnold Boecklin (Weisert, 1904)



AABBBCCDDDEEFFGGHH
IIJJKKMNOOPPQQRR
SSTTTUVVWWXXYYZZ
1234567890!\$

^&()_+{}:"?!\,;=?[\]
~`]:;~"'"~&~)~÷

AABBBCCDDDEEFFGGHH
IIJJKKMNOOPPQQRR
SSTTTUVVWWXXYYZZ
1234567890!\$

^&()_+{}:"?!\,;=?[\]
~`]:;~"'"~&~)~÷

Decorative and Display Type

Art Deco

If Art Nouveau was about finding beauty in organic intricacy, Art Deco was about finding beauty in geometric simplicity.

First appeared in the 1920s and 30s, with revival 1970s and 80s.

Almost by definition, Art Deco meant sans serif type. The most common such face is Avant Garde (1974, Lubalin), which is striking but hard to read at length. A more graceful geometric sans is Futura (Renner, 1927-39). There are also more quirky faces in this category, such as Kabel (Koch, 1927-30). A recent popular Art Deco display face is ITC Anna (1991?).

**Avant Garde
Gothic Bold**

**A A B C C C A D E E A F E A R
G G A H I H H I J K K A L L A L M
M N N N I O P R Q R R A S S S
S S T S T T U U T V V V W W
W X Y Z A a e e i m n r**

**abccdeefghijklmnop
qrsttuvwxyz**

11234567890

**/ (& & & \$ % / , . : ; ! ? " ' - *) (**

aaaabbbbc d d e f g g h i j k l m
noooppq r r f s t u v w x x y z

Original design for Futura

A B C D E F G H I J K L M N O
P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r f s t u
v w x y z

Final design for Futura

