

## TYPE LETTER TERMS/STRUCTURE

Type, like anything with physical form, has a particular anatomy, each letter having similar and different parts and strokes. Type size is measured in points, a system standardized by Pierre Fournier in the 1700s. The pica-point system as compared to the inch allows 6 picas to an inch, 12 points to a pica, and 72 points to an inch. Type is measured from the top of the ascender to the bottom of the descender. A line of type with both Capitals, ascenders and descenders of 72 point would measure close to an inch high. A capital letter, however, is about 2/3rds as high as the total point size. Therefore, a 72 point size capital 'A' would measure about 48 points in height. Due in part to regional differences in measurement and an unfortunate shrinkage in paper, the "standards" for measurement of type size are less than uniform even today. To further complicate matters from typeface to typeface we still have inconsistency.

The term TYPE FACE, which comes from lead type terminology where the "face" of the type received the ink and made the impression, means the specific design of a set of letters, numbers and symbols. A typeface family is comprised of various weights and styles of a similar typeface.

### Font

The Complete set of characters of a single typestyle, including upper and lowercase characters, numerals, punctuation, pi characters, etc.

### Kerning

Deleting space between certain letter pairs with parallel diagonal strokes, such as As, Vs and Ws, or between characters such as T and O; to create a more even letter spacing.

### Type Size

Type is measured in point size. Line length is measured in picas. There are 6 picas per inch, 12 points per pica, and 72 points per inch.

### Ligatures

Miniscule metal type molds set in pairs, such as "ff" "fl" interlacing the letter forms for the purpose of reducing the real estate between letters them would otherwise appear overly separated, and aesthetically unappealing.

### Leading

A term that comes from hot type where actual strips of lead were put between the lines of cast type to increase the space between them; usually one or two extra points plus the actual point size of the type used.

### Justification

The manner in which lines of type align to left or right margins. According to most recent studies left justified type is more legible (easier to read) than center, right, or full justified counterparts by as much as nine times by tested subjects.

### Tracking

Selectively adding or subtracting spaces between all the letters on a line to lessen the impact of spaces between words creating rivers of white.

### Capital

The uppercase of the letters of the alphabet which sit on the baseline and extend to the height of the ascenders.

### X-Height

The body height of letters from the baseline without the ascender.

### Ascender

The part of a letter which extends above the x-height or x-line.

### Descender

The part of the letter that extends below the baseline.

### Counter

The space within convex letters.

### Bowl

The curved part of the character that encloses the circular or curved parts (counter) of some letters such as d, b, o, D, and B is the bowl.

### Apex

The points on some letters where strokes angle together.

### Arm

Horizontal or diagonal extensions on some letters.

### Bar

A horizontal line which crosses some letters at the midline.

### Baseline

The implied line that letters align themselves on horizontally

### Picas

There are 12 points in a pica. If you divide the point size of a headline by 12, you get the number of picas. There are roughly 6 picas to an inch.

### Beard line

The area below the baseline where the descender of letterforms reach.

## HISTORY

### Cuneiform (ideograph)

A very early writing system consisting of wedge shaped marks devised by the Sumerians.

### Heiroglyph (pictograph)

A picture based method of writing employed by ancient Egyptians.

### Vatican Vergil

Pagan and Roman in conception, it is the style which Christian Bibles later derived their form. It is the earliest evidence of the illuminated manuscript form.

### Book of Durrow

The earliest example of designed and ornamented Celtic Book.

### Book of Kells

The ultimate example of designed and ornamented Celtic Book whose complex, abstract patterns are the penultimate in illuminated design. Culminating in 2100 ornate capitals and 339 leaves. Completed in 795 AD.

### Charlemagne

Emperor of the New Holy Roman Empire, (Germanic and English federation) who instituted an age of literacy from whose Palace in Aachen. Established a school for illuminated manuscripts to codify and standardize the written language using Carolinian minuscules (uncials) as a basis for structure in 789 AD.

### Carolinian type

the creation of type similar to handwriting which made it quicker and easier to standardize and transcribe. abandoned by most countries in favor of regional preferences.

### Lindisfarne Bible

Considered to be the full flowering of Celtic book design.

### Orphans

A single word at the end of a paragraph sitting alone on a line.

### Widows

A single line at the end of a paragraph that appears on the following page.

### Diminuendo

A proportional subdivision of type size that progressively becomes smaller as it flows down a page.

### Majuscule

Capital or uppercase letters.

### Miniscule

Lowercase letters..letters based on uncials

### Textura

Typically German in nature, these fonts were codified and analyzed by Albrecht Durer.

Distinctly associated with the German letterform, it is based on the square and first used by Gutenberg in the 42 line Bible which was possibly designed by Peter Schoeffer of Fust and Schoeffer.

### Uppercase and Lowercase

literally derived from the location of the type in the cases where they were stored

### Incunabula

Term literally meaning baby or birth used as a term for books printed before the 16th century.

### Chi-Rho page

A page within the Book of Kells which is a greek "christogram". A symbol for Christ.

Considered one of the finest expressions of illuminated writing recorded.

### Scriptorium-Scriptori

writing room,-a well educated scholar

### Colophon

Inscription at the end of the book detailing facts about its production

### Celtic Innovation

Leaving space between words to make it easier to read\_

### Ornament was used in three ways in Illuminated Manuscripts:

- 1) opening pages were singled out for illumination
- 2) full pages called "carpet pages" were singled out for densely packed design
- 3) frames and borders were created to enclose illustrations

### Typography

The process for printing independently using movable type with bits of metal and wood

### Xylography

relief printing

### Book of Hours

A devotional book created by the Limbourg brothers for Charles the V of France.

### Paper

originating in China around 500 AD, moved to Arab world 751 AD : Samarkand, and introduced in Sicily in 1102

### European Block Printing

originated as devotional book prints of saints

### Ars Moriendi

book of the dead in europe, literally the art of dying. Forewarning the Apocalypse and how to be ready.

### Johann Gutenberg

credited with creating the first printing press using movable metal type:1450 in Mainz Germany

### 42 Line Bible

Bible first designed by Gutenberg taking ten years to create, and based on the golden section rectangle as its grid.

### Fust and Schoeffer

Credited with being the first publishing house in Europe

### Fust, Faust and the Faustian Bargain

Faustian legend has it that Faust exchanged his soul for knowledge and earthly pleasures. Some believe it derives originally from Fust and that the bargain struck between Gutenberg and Fust is the derivation for the true Faustian Bargain.

### Martin Luther

Leader of the reformation movement against Pope Leo X and Emperor Charles V resulted in his excommunication from the church after publication of the 95 theses.

### Adolph of Nassau

May have singlehandedly created more widespread printing in France and Italy when he invaded Mainz causing printers to flee after he confiscated their belongings. One of which was Gutenberg.

### Divinorum Officiocorum

Book designed by Jan Fust and Schoeffer which imitated the style of the illuminated manuscript with small type and large intricate drop caps.

### Albrecht Pfister

May be the first printer to illustrate books with Woodblock prints

### Albrecht Durer

Influenced by the Italian Masters, Leonardo Da Vinci, Bellini, and Alberti who all used mathematics as a basis for their work, Durer financed many of his visits to Italy by selling woodblock prints of his work. Master engraver, graphic artist and printer. Noted for illustrating fifteen mammoth woodcuts with unprecedented emotional power. Designed mathematically proportioned roman capitals with clear instructions on the formation of letter forms relating each letter to the square and the Trajan alphabet. 1/10 ratio of stroke to height.

### Nuremberg Chronicle

Considered by some as the most beautiful book of typographic and illustrative excellence ever produced using Wood block illustrations. A masterpiece of the incunabula period.

### Jean Dupre

Designer of France's first great typographic book 'La cite de Dieu'.

### Broadside

Printing on one side of the paper only

### William Caxton

English printer translated the *Recuyell of the Histories of Troy* from French to English.

## Major contributors to Early Graphic Design

Albrecht Durer	
Guttenberg	Fust
Emperor Maximillian	Pietro Bembo
William Caxton	Ars Moriendi

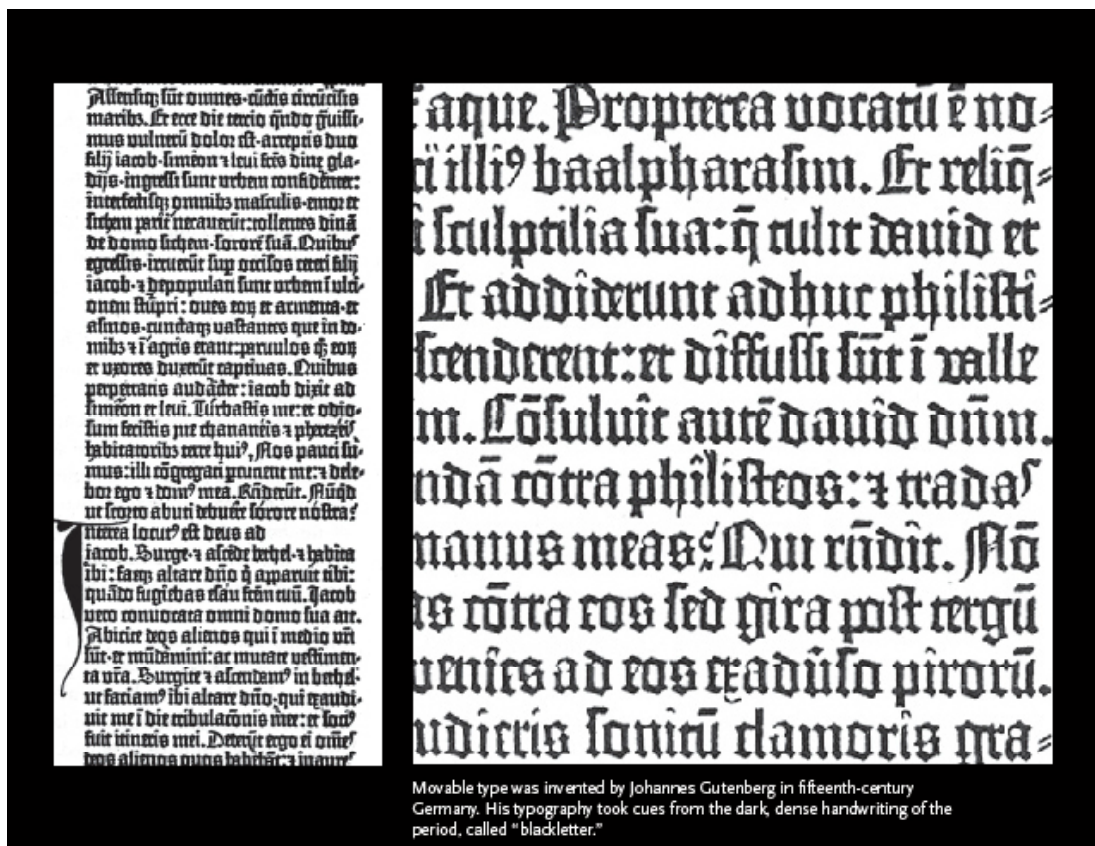
# Blackletter Textura Fraktur

Holy Roman Emperor Maximilian I (c. 1493–1519) established a series of books and Bibles and had a new typeface created specifically for this purpose. One difference between the Fraktur and other blackletter scripts is that in the small-letter o, in the left part of the bow is broken, but the right part is not. Hence the name Fraktur. If we can make a generalization about national differences, the protestants under Maximilian printed German, using Fraktur as the primary face, the Catholics printed Latin, using Antiqua. "One edition of the Bible even had each verse start with a Fraktur letter when the topic was salvation or other positive events, but Antiqua when it was satan, hell, and eternal damnation." <sup>1</sup> These differences heightened national pride, identity and unfortunately enmity between countries and religions. Ironically, it was once used by the Nazis because

A letterform used to imitate the look and feel of illuminated writing primarily used in Central Europe in the 15th century.

of its uniquely German character and history and therefore deemed superior to all other forms of type. The irony arises when Fraktur, was later found to be difficult for the Germans to read in ordinary transmissions of information and was ordered to be discarded. The reason given for its abandonment then was blamed upon its "Jewish" origins. It was officially discontinued as a primary face for the Third Reich in 1941, but due to the stress on resources caused by World War II, Fraktur was still widely used by the Nazi regime until the war's end in 1945.

<sup>1</sup><http://www.waldenfont.com/content.asp?contentpageID=5>



Movable type was invented by Johannes Gutenberg in fifteenth-century Germany. His typography took cues from the dark, dense handwriting of the period, called "blackletter."

Oldface: Typefaces that incorporate the Roman alphabet style. Roman script started and spread from Italian humanists' attempt to revive the style of handwriting used in ancient Roman inscriptions and to imitate the Carolingian style of handwriting used at the end of the 8th century.

C. Sweynheym and A. Pannartz first used Roman type in 1465, and its use later spread to Germany.

These Roman typefaces, however, retained a slightly Gothic flavor compared with today's Roman type. The present-day Roman type is based on the one first used by N. Jenson in 1470, which is said to be the most beautiful of all Roman typefaces.

## Carolingian

# TRAJAN

Subiaco: Conradus Sweynheym and Arnoldus Pannartz. Typ.1:120R Gft549

### Old Face

Influenced by the classical Roman letterforms with little difference between thick and thin strokes; often on an angled axis.

ABCDEFGHIJK  
LMNOPQRSTU  
VWXYZ  
abcdefghijklmnop  
qrstuvwxyz12345

### Gothic or Black Letter

Calligraphy style script derived from the manuscript writing of the Middle Ages.

ABCDEFGHIJK  
LMNOPQRST  
TUVWXYZ  
abcdefghijklmnop  
qrstuvwxyz12345

One thing generally remained constant even in the varied forms as they are expressed here, and that is: the proportion of the height to the stroke width is 10 to 1.

# Anatomy of Type

