

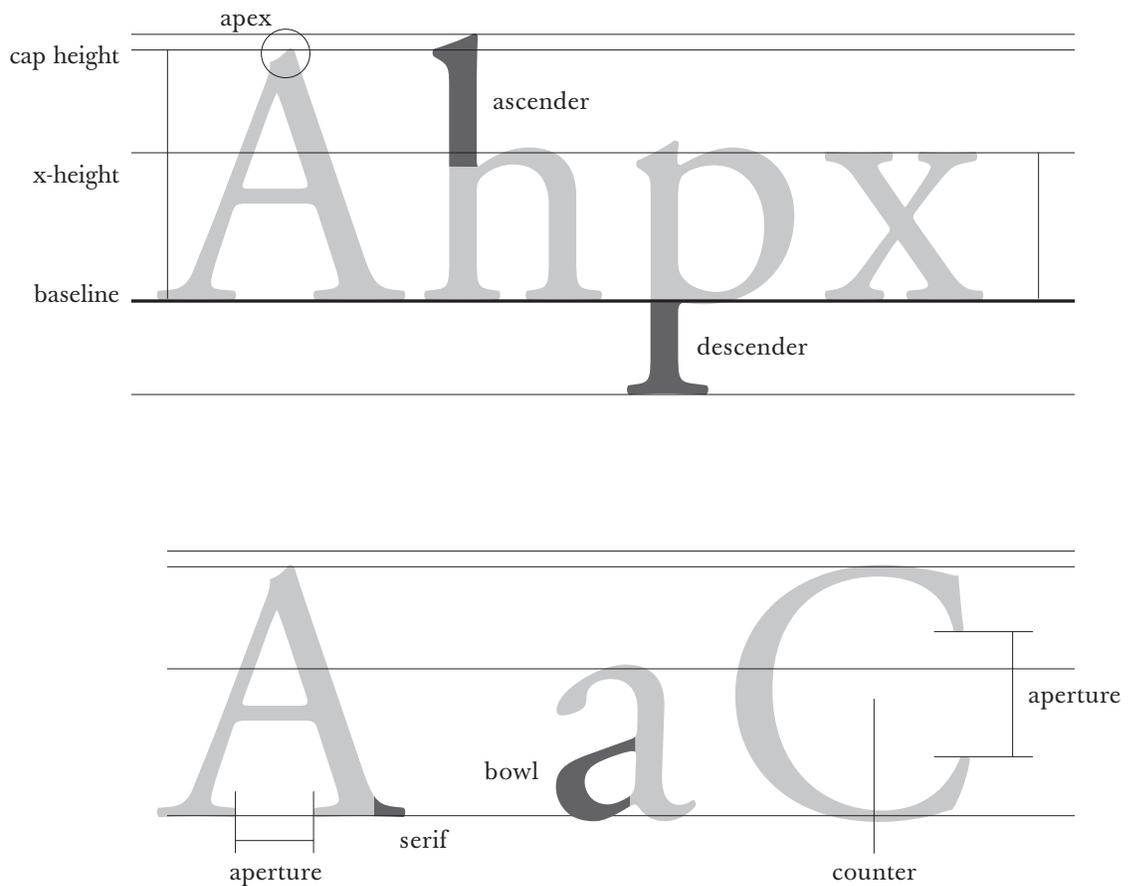
typography History and Key Elements

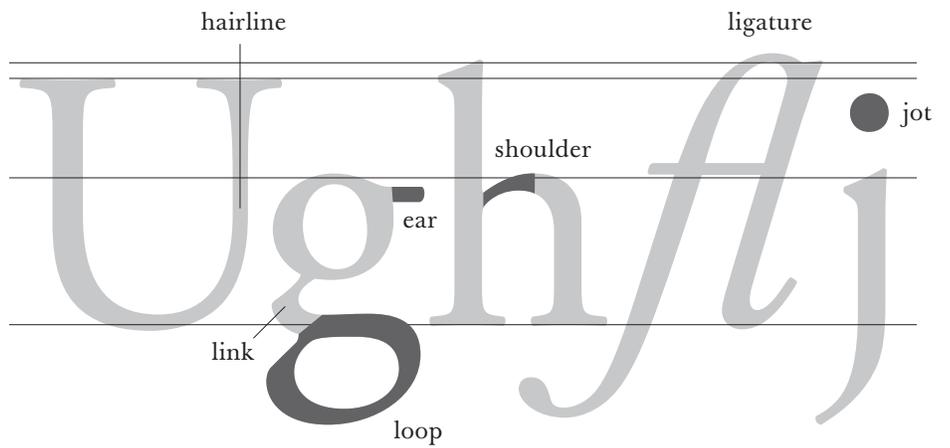
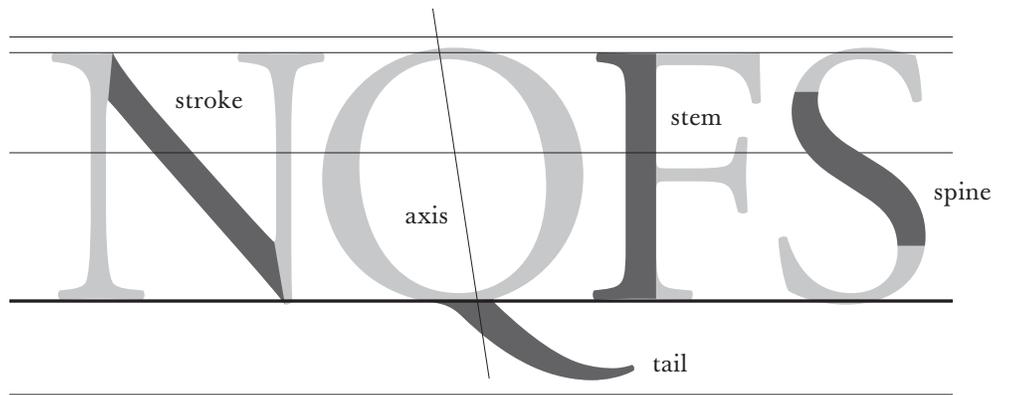
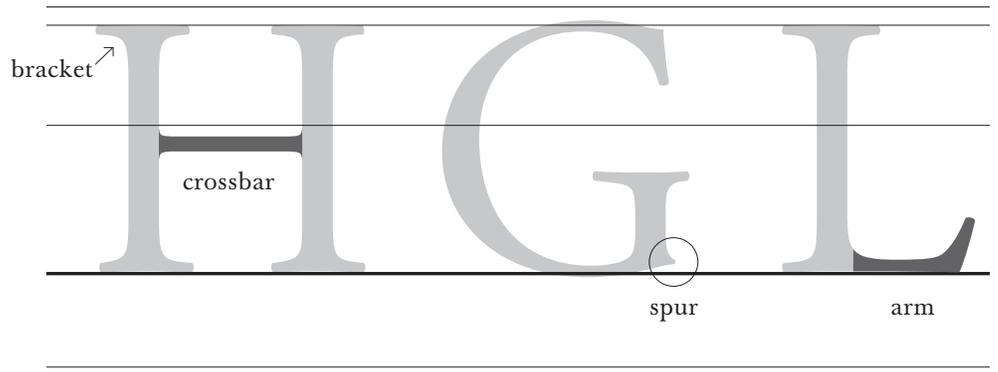
nomenclature ::

arm	short horizontal strokes, as in E, F, L, T, or inclined upwards as in Y, K.
ascender	the stem of a lowercase letter projecting above the x-height, as in b, d, f, h, k, and l. Also referred to as extenders.
aperture	the openings of letters such as A, c, S, v, and e.
apex	junction of stems, as in A, V, M, and W.
axis / stress	in typography, the axis of the letter generally means the axis of the stroke, which reveals the axis of the pen or tool used to make the letter; in old style types, the axis is inclined to the left, while in traditional and modern types it is vertical.
baseline	the imaginary line supporting the bottom serifs of capitals and lowercase letters.
bowl	rounded—fully or modified—forms in such letters as o, b, d, etc.
bracket	the joining of the stem of a letter to the serif. this is also referred to as a fillet.
cap height	the distance from baseline to cap line of an alphabet, which is the approximate height of uppercase letters.
color	the darkness of the type as set in mass; the spacing of words and letters, the leading of lines, and the incidence of capitals, not to mention the blackness of the ink and the paper it is printed on—this all affects the color of type.
contrast	the degree of dissimilarity between thick and thin strokes of a given letter.
counter	the partially or fully enclosed interior area of a letter.
crossbar / cross-stroke	a horizontal stroke connecting two stems as in A and H, or a simple stroke as in f and t.

descender	the stem of a lowercase letter projecting below the x-height, as in p or q.
ear	the stroke attached to the bowl of the lowercase g; typographers also use the same term for the lowercase r.
font / typeface	a selection of characters of one size and design of type.
italic	a sloped or cursive variation of a roman letterform; in most cases, this represents a complementary style of the upright letter.
ligature	two or more letters tied into a single character, for example fi or fl.
lining / modern figures	numerals of the same height as the uppercase characters.
link	the stroke connecting the bowl and the loop of the lowercase g.
lowercase / lc	the smaller letters of a font or typeface.
loop	the lower portion of the g.
non-lining / old-style figures	numerals that are similar to the lowercase characters in that they vary in size and may have ascenders and descenders.
roman	an upright letter, as opposed to a sloped or italic letter.
sans serif	a type style where the letterforms are free of serifs.
serif	the beginning or terminal stroke drawn at a right angle or obliquely across the arm, stem, or tail of a letter.
small caps	a complete alphabet of caps that are the same size as the x-height of lc letters.
stem	all vertical strokes of a letter, and full length oblique strokes as in V, W, and Y.
tail	short downward strokes, as in K and R. The term is used for the Q even when it is a curved, horizontal stroke.

- terminal the end of a stroke not terminated with a serif.
- uppercase / uc / caps the large letters of a font of type.
- u&lc / upper and lower case terms used to distinguish capital letters from text letters; derived from the literal separated placement of letters in the printers type case containing a font of type.
- weight the darkness (heaviness) of a typeface, independent of it's size.
- x-height the distance between the baseline and midline of an alphabet, which is normally the approximate height of the unextended lowercase letters; the x-height varies from face to face, e.g. 60 pt. Helvetica is larger than 60 pt. Garamond.





Adobe Jenson Pro designer: Nicolas Jenson | 1475 | France | classification: Old Style / Renaissance

ABDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Garamond designer: Claude Garamond | 1532 | France | classification: Old Style / Renaissance

ABDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Baskerville designer: John Baskerville | 1763 | England | classification: Transitional

ABDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Bodoni designer: Giambattista Bodoni | 1767 | Italy | classification: Modern

ABDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Futura designer: Paul Renner | 1924 | Germany | classification: Sans Serif

ABCDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Univers designer: Adrian Frutiger | 1954 | Switzerland | classification: Sans Serif

ABCDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklm
opqrstuvwxyz

Helvetica Neue designer: Max Miedinger | 1957 | Switzerland | classification: Sans Serif

ABDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Archer designer: Hoefler & Frere-Jones | 2001 | NYC | classification: Slab Serif

ABDEFGHIJ
KLMNOPQR
STUVWXYZ
abcdefghijklmn
opqrstuvwxyz

Courier designer: Howard “Bud” Kettler | 1955 | classification: Monospaced Slab Serif

A B 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
s t u v w x y z

classifications :: As there are thousands of typefaces, there are also several ways to classify typefaces. Many share similar characteristics due to aesthetic, historical, and technological factors. Letters must be able to be described and categories accepted universally by typographers so others outside of the profession may also understand them. These terms are applied retrospectively, after many of these typefaces were developed.

old style / renaissance The earliest printed Roman types. They are based on the handwritten manuscripts of 15th Century Italy. First printed in Venice by Nicolas Jenson, the Old Style typefaces can further be divided into two other terms: Humanist and Garalde. Humanist faces are derived from the Nicolas Jenson types. Fonts such as Centaur and Jenson are examples of this genre. Garalde—a hybrid term combining the names Garamond and Aldus—is derived from the fonts made popular by the French printer Claude Garamond and the Italian printer Aldus Manutius in the 16th Century. These types are often printed on soft, thick water-dampened paper with uneven texture.

- transitional For lack of a better term, Transitional types are placed between the Old Style and Modern categories. These types embody the ideals of the Age of Reason. The Romain du Roi (1694) by the French typographer Robert Grandjean was a typographic exploration in which the construction of letters were based on a mathematical basis. English typographer and printer John Baskerville would later instill some of these qualities in this type. These fonts are somewhat removed from the handwritten manuscripts and printed letterforms of the Renaissance but not yet as mechanical as the Modern types.
- modern / didone Technological improvements in printing presses and paper making made it possible for types with hairline serifs and strong vertical stress to flourish. These types were first invented by the French printers Firmin & Francois-Ambroise Didot and Italian printer Giambattista Bodoni in the mid-18th century. These fonts are even further removed from handwritten letters of Renaissance and would become the basis for the “Fat Face” types used in the 19th century advertising.
- slab serif These types came to prominence during the Industrial Revolution of the nineteenth century. They are sometimes called “Mechanistic.” The basic characteristic of types in this category is that the thick slab serifs are often visually the same weight/thickness as the main stem of the letter. Types in this category are often divided into two subcategories. The first subcategory is distinguished by the square slab serifs. The second subcategory is distinguished by the bracketed (slight rounded connecton when the serif and the stem meet) slab serifs.
- sans serif These types are characterized by the lack of serifs. The word “sans” is French for without. The term “grotesk” is used for sans-serif fonts in Germany. The term “gothic” is sometimes used for sans-serif fonts in the United States and England. Types in this category can sometimes be divided into three categories: Grotesque, Geometric, and Humanist. Grotesques are characterized by slight weight variations in the strokes of the letter. Geometrics are based on simple geometric shapes and are usually monolinear. The proportion of Humanist sans-serif types are based on Old Style faces. They have more stroke contrast and therefore are not monolinear.
- black letter These were the first printing types in Europe. It is based on the handwritten letters of the Middle Ages in Northern Europe. It was still the most popular type in Germany well into the early 20th Century. “Old English” is a common misnomer for this category of type. These types have become cliché's for identities of Heavy Metal Bands, Medieval Mystics, and Neo-Nazis.

measure :: Typography is a measure in points and picas. A point is a very small unit of length nearly 1/72 of an inch. A pica is a unit of measurement and contains exactly 12 points. There are approximately 6 picas to an inch. The point is used for two principle purposes: indicating type size and specifying space between lines of type. Picas are also used to measure the length of lines.

At one time, all type was cast onto individual blocks of lead. One could ascertain the type size simply by measuring the height of these blocks. The distance could be measured in points. A certain amount of lead was placed above and below each character to prevent letterforms, especially ascenders and descenders, from touching when type was set in lines. This slight space is referred to as body clearance.

Lead is no longer used to separate lines of type; however the needed body clearance is assigned by the typeface designers. Each character incorporates the required space above and below the letterform, therefore the size of a letter cannot be measured to determine point size. This may sound a bit odd, but it makes sense when you consider that the type designer must allow for the “white space” which surrounds each letterform. (Ergo, negative leading and letterspacing is possible digitally, but not physically.)

If no space is added between lines of typeset copy, it is possible to determine the type size by measuring the distance from baseline to baseline. If any additional space is added between lines, measuring from baseline to baseline will prove misleading. For absolute certainty, it is necessary to check a sample setting where type sizes are indicated. Picas are used to measure column widths or the length of a single typeset line. Picas are also used to measure the depth of a column of type.

[Excepted from William Bevington, “Typography: The Principles, A Basic Guide to Using Type” New York: The Center for Design and Typography of the Cooper Union for the Advancement of Science and Art, 1991.]

sizing ::	Points are used to indicate two principal measurements: the size of type, and the distance from the baseline of one line of type to the baseline of the next line of type.
text type / body copy	Generally 9, 10, or 11 pt. By definition, text type is 14 pt. and below. Newspapers often use 8 pt. type. Legal disclaimers are set in 6 pt. type; and children's books are often set in 12 or 14 point type.
display type	Type sizes above 14 pt.



75 pt. Univers vs. 75 pt. Berthold Baskerville Book (note how height changes)

spacing ::	Used to indicate the distance between lines of type and in between letter.
leading	The amount of vertical space between baselines of print. “Leading” refers to the amount of physical lead between lines of metal type. Today, the term has translated digitally, although it does not follow all the same rules.
kerning	Kerning is the adjustment of space between pairs of letters. Some pairs of letters create awkward spaces. Kerning adds or subtracts space between letters to create more visually appealing and readable text.
tracking	Tracking differs from kerning in that tracking is the adjustment of space for groups of letters and entire blocks of text. Use tracking to change the overall appearance and readability of the text, making it more open and airy or more dense. Both kerning and tracking are forms of “letterspacing.” Shorthand puts the point size over the leading, for instance the example below is 17 pt. type with no extra leading. 9/12 means 9 point type with 3 points of leading.
17/17 (set solid)	<p>Dear John Baskerville,</p> <p>You were a scum bag but your type is brilliant. Especially your figures.</p>