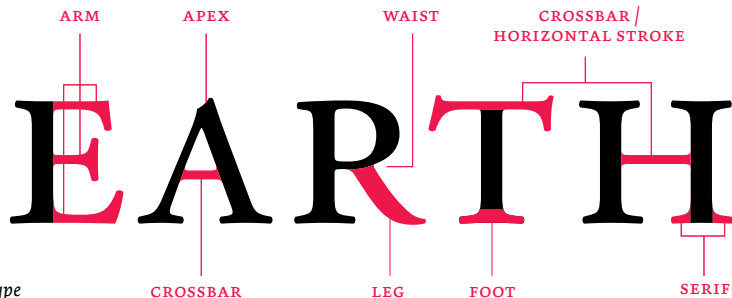
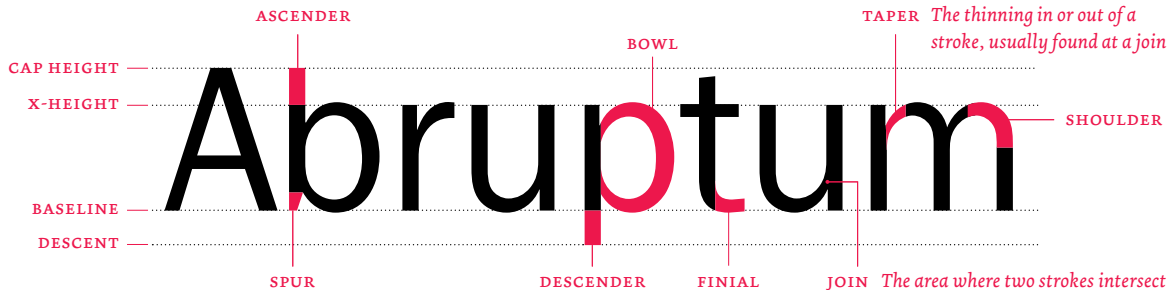
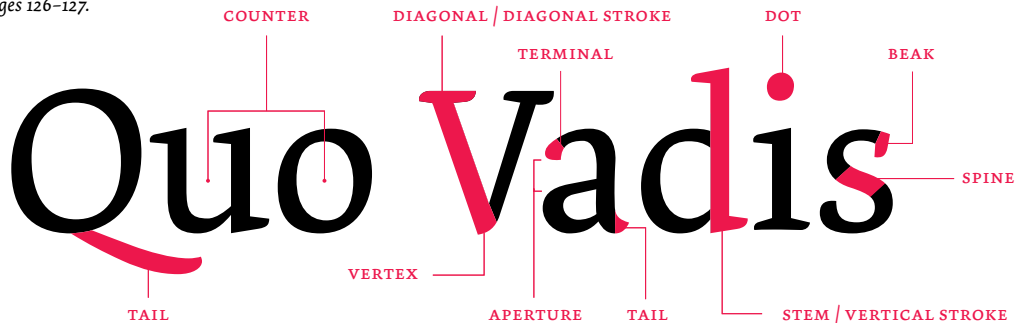


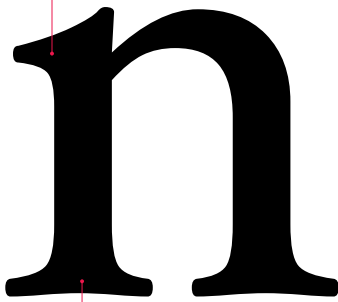
LETTER STRUCTURE



For more lettering and type terms and definitions, see the Glossary on pages 126–127.

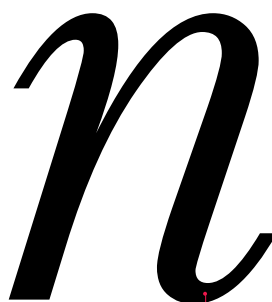


BRACKETED / ADNATE SERIF

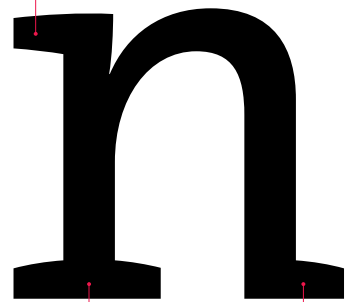


REFLEXIVE A serif that implies an abrupt change in the direction of the stroke, such as that found at the feet of most roman letters

UNBRACKETED / ABRUPT SERIF



TRANSITIVE A serif that suggests a continuous motion into or out of a stroke, such as on most italics



BILATERAL SERIF

UNILATERAL SERIF

CALLIGRAPHIC SERIF,
ASYMMETRICAL

CUPPED SERIF



WEDGE SERIF

BRACKETED
SERIFUNBRACKETED
SERIF

TEXT SERIFS

SLAB SERIF

CLARENDON
(BRACKETED SLAB)

LATIN



TUSCAN



ANTIQUÉ TUSCAN



DISPLAY SERIFS AND NINETEENTH-CENTURY STYLES

TEARDROP
TERMINALBALL TERMINAL,
BRACKETEDBALL TERMINAL,
UNBRACKETEDSHEARED
TERMINAL

BEAK



TERMINALS

SERIFS AND TERMINALS

represent the entrance and exit marks of the pen. The origins of various serif shapes relate to different writing styles, tools, pen angles, and amounts of pressure. By the eighteenth and nineteenth centuries, the forms of serifs and terminals had become detached from their calligraphic origins, as type designers and sign painters treated serifs as separate ornamental or geometric elements.

AXIS refers to the angle of emphasis within a letter or stroke. Letters or typefaces with modulated strokes have areas of thicks and thins, visible in rounded characters like the o or a. Typefaces derived from broad-nibbed pen writing typically have a diagonal axis that reflects the angle of the pen's tip. Multiple axes can exist within the same font or letter. Axis differs from slope, which refers to the angle or slant of an italic or oblique font.

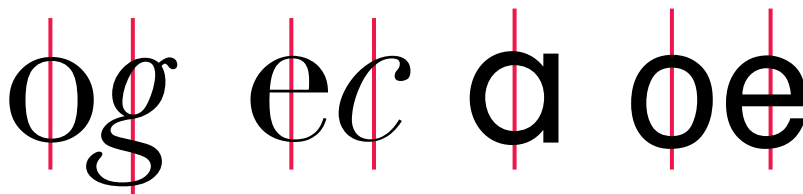
(See also Angle of Translation on page 52.)



ADOBE GARAMOND

ADOBE JENSON

DOLLY



BASKERVILLE

DIDOT

FUTURA

HELVETICA

CONTRAST is the amount of variation from thick to thin within and between the strokes of a character. Without any contrast or stroke modulation, letters suffer from uneven color, and their horizontal strokes appear optically thicker than their stems.

Letters drawn with no
stroke contrastSCALA SANS
low contrastSCALA
medium contrastDIDOT
high contrast

Aa

Aa

Aa

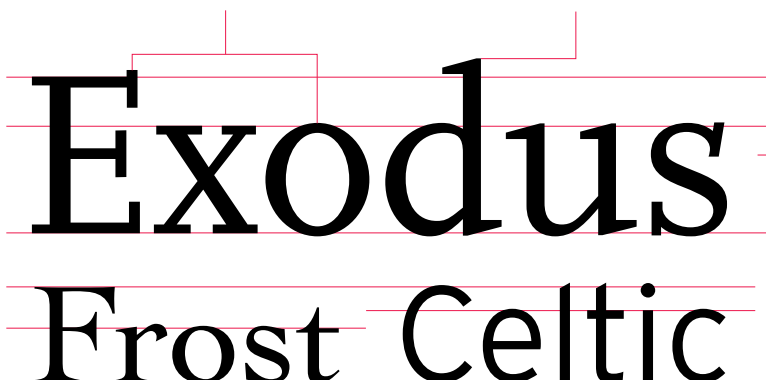
Aa

The **X-HEIGHT** is the vertical measurement of a lowercase letter's main body, usually defined by the x. It differs from typeface to typeface. Increasing a font's x-height increases the apparent size of the letters and generally improves legibility at small sizes. An excessively large x-height can have the opposite effect, reducing the overall readability of word shapes and making the letters seem graceless. An x-height that is too small can produce letters that look top-heavy or stunted.

Rounded characters and pointed serifs extend slightly above the cap height or x-height and dip just below the baseline. These subtle overshoots optically compensate for the softness or pointedness of the forms—without an overshoot these characters would appear smaller than the flat or squared letters.

Ascenders may be taller than the cap height.

The x-height is generally greater than half of the cap height.



Cochin has a small x-height.

Interstate has a large x-height.

TYPE AND LETTERING CLASSIFICATION

Like scientific classification, the categorization of letters and type enables one to better analyze and understand their traits, forms, and history. Printers and type historians first devised classification systems in the nineteenth century, providing order and categorization to an exploding menu of new type styles. The categories generally correspond to periods of art and intellectual history, from the humanist faces first used during the Renaissance to the transitional fonts of the neoclassical period. Different type foundries and scholars gave their own labels to letter classes, and the specific names and descriptions continue to generate disagreement today. Sans serif letters alone have been referred to as grotesks, grotesques, gothics, dorics, antiques, and lineals. The actual terms of classification, however, are less important than the characteristics and systems that they represent. One does not have to know the scientific term for a dog to know that it barks.

At their most useful, categories of lettering and type represent sets of attributes shared by many typefaces and lettering treatments. These classes give designers and typographers a solid starting point for discussing and analyzing typographic systems. Type categories are guideposts only, since their borders are not absolute. While most letter examples can fit into a single category, many defy neat classification. Just because the attributes of scripts and slab serifs seem incompatible does not mean that slab serif script letters do not exist. Some transitional or geometric sans serifs exhibit humanist influences, while semi serif or mixed serif fonts live with one foot in the serif and the other in the sans serif world. As experimentation continues, letterers and type designers are not constrained by the boundaries of traditional type categories.

The image shows the letters 'Aa' in the Adobe Garamond typeface. The letters are characterized by their elegant, slightly calligraphic forms, with a diagonal axis and soft, wedge-shaped serifs.

Adobe Garamond

Humanist / Old Style

Renaissance- and Baroque-era type designers looked to Roman lettering and calligraphy as inspiration for their typefaces. These humanist letterforms incorporate elements of calligraphic handwriting such as the diagonal axis of the broad-nibbed pen and the softened, wedge serifs that replicate the pen stroke's starting point. Type designers continue to create contemporary revivals and interpretations of humanist forms.

The image shows the letters 'Aa' in the Baskerville typeface. These letters are more formal and rationalized than humanist forms, featuring a vertical axis, increased stroke contrast, and symmetrical serifs.

Baskerville

Transitional / Neoclassical

Transitional serif letters retain humanist traces, yet their forms are more ordered and rationalized than old style characters. These rationalized features usually include a vertical axis, increased stroke contrast, and details that appear formalized and constructed, like symmetrical serifs.

The image shows the letters 'Aa' in the Didot typeface. These letters are modernized and streamlined, with a strictly vertical axis, heightened or extreme stroke contrast, and serifs that feel mechanically drawn or constructed rather than smoothly written.

Didot

Modern / Didone

Typefaces like Bodoni and Didot modernize and streamline the forms of the alphabet, pushing them farther from their humanist origins. Modern letters have a strictly vertical axis, heightened or extreme stroke contrast, and serifs that feel mechanically drawn or constructed rather than smoothly written.

The image shows the letters 'Aa' in the Serifa typeface. These letters are slab serif, with squared-off serifs that abruptly extend from the character's main strokes. They were first developed in the early nineteenth century for signage and advertising printing.

Serifa

Slab Serif / Egyptian

As their name implies, slab serif letters possess squared-off serifs that abruptly extend from the character's main strokes. First developed in the early nineteenth century for signage and advertising printing, the slab serif, with its relatively uniform stroke weight, was a counterpart to the extreme stroke contrast of the popular Ultra Bodoni styles.

The image shows the letters 'Aa' in the Clarendon typeface. These are a specific subset of slab serif letters where the serifs are bracketed (adnate) so that they flow smoothly into the stem of the letterform. Many clarendons bear similarities to transitional and modern forms, exhibiting greater stroke variation than typical slab serifs.

Clarendon

Clarendon

Clarendons are a specific subset of slab serif letters. Where the typical Egyptian's serifs terminate in angled, abrupt connections, a clarendon's serifs are bracketed (adnate) so that the serifs flow smoothly into the stem of the letterform. Many clarendons bear similarities to transitional and modern forms, exhibiting greater stroke variation than typical slab serifs.

The image shows the letters 'Aa' in the Scala Sans typeface. These are humanist sans serif fonts that did not become popular until the twentieth century. Examples of sans serif lettering exist in some Renaissance inscriptions and have precedent in classical Greek letterforms. The modulated stroke weight, greater contrast, and true italic versions of humanist sans serif letters convey a calligraphic influence, which in some cases even includes flared terminals that suggest serifs.

Scala Sans

Humanist Sans Serif

Though sans serif type and lettering did not become popular until the twentieth century, examples of sans serif lettering exist in some Renaissance inscriptions and have precedent in classical Greek letterforms. The modulated stroke weight, greater contrast, and true italic versions of humanist sans serif letters convey a calligraphic influence, which in some cases even includes flared terminals that suggest serifs.

The image shows the letters 'Aa' in the ITC Franklin Gothic typeface. These are transitional sans serif fonts, developed as advertising display type based on the work of contemporary sign painters. While the letter shapes are similar to serif forms, most of the handwritten qualities are missing, giving transitional sans serifs a more detached, functional quality. Typically, transitional sans serifs lack a true italic, display low stroke contrast, and appear rationalized and constructed.

ITC Franklin Gothic

Transitional Sans Serif / Industrial or Realist Sans Serif

Transitional sans serif fonts, like their nineteenth-century counterpart, the slab serif, were developed as advertising display type, based on the work of contemporary sign painters. While the letter shapes are similar to serif forms, most of the handwritten qualities are missing, giving transitional sans serifs a more detached, functional quality. Typically, transitional sans serifs lack a true italic, display low stroke contrast, and appear rationalized and constructed.

Aa
Futura

Geometric Sans Serif

Based on geometric rather than humanist forms, the characters of geometric sans serifs are constructed around a basic set of elements—typically circles, triangles, and straight lines. This rigid design approach frequently imparts a modular and mathematical spirit to the letterforms. Although these alphabets were first developed in the early twentieth century, the proportions of some geometric sans serif letters bear a resemblance to those of classical Roman capitals.

Aa

Half Block / Octagonal

Another style popularized by nineteenth-century sign painters and wood type makers, half blocks are formed around an octagonal shape, using straight lines. While the angularity of their facets gives half blocks a geometric or machined quality, the use of straight lines to suggest complex curves can lend an unexpected subtlety to some letterforms.

Aa
Bickham Script

Script / Cursive

Scripts include many lettering styles, from calligraphic to brush lettering to even mechanical and geometric letterforms. More than other type or lettering styles, scripts and cursives directly reference the handwritten origin of the alphabet. As in cursive handwriting, a connecting stroke often joins adjacent forms, creating words that flow from letter to letter. Reflecting the handwriting process, scripts generally employ italic rather than roman letterforms.

Aa

Decorative / Display / Ornamental

Decorative or display letters include any type or lettering with embellished or decorative forms. While they often exhibit attributes of other classes, display letters are specifically meant to be used at large sizes where their detailed or unconventional features work best. Since custom lettering is better suited than type to creating detailed, ornamental, or monumental letterforms, contemporary lettering often falls into this broad category.

Aa

Organic

Organic letterforms generally convey a human-made or natural origin. Their forms usually feel spontaneous, loose, or even grown, rather than built up and mechanically constructed. While many organic typefaces or letters can also be considered decorative, some fonts are surprisingly readable at text sizes and have a warm, handwritten feel.

Aa

Blackletter / Old English / Gothic

Gothic lettering styles were widely used throughout medieval Europe, and Johannes Gutenberg employed a gothic Textura as the first European printing type. Gothic letterforms unrepentantly display the strokes of the broad-nibbed pen, and the capitals are frequently ornamental and finely detailed. Poor legibility and strong associations confine most contemporary gothics to the realm of display lettering and type.