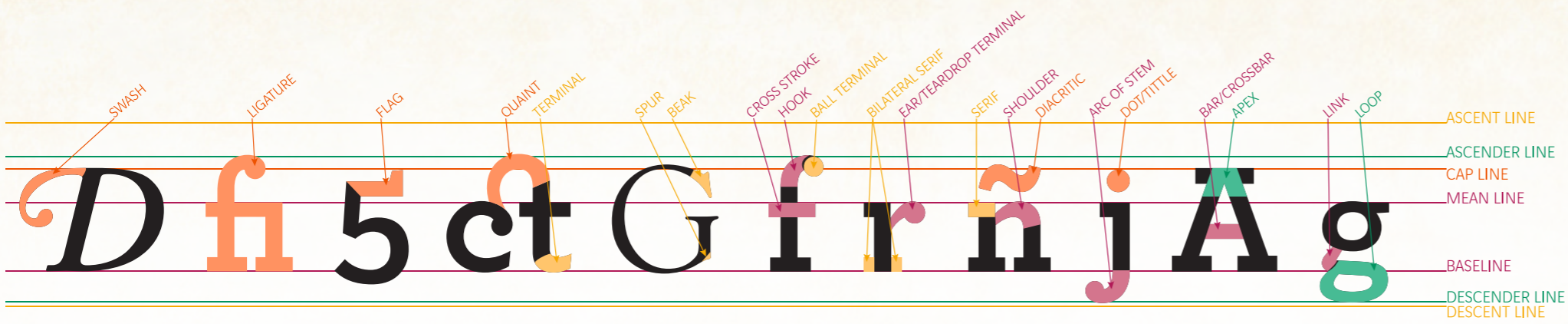


The Anatomy of Type



SPACES & ANGLES

Counter - The enclosed or partially enclosed circular or curved negative space (white space) of some letters such as d, o, and s is the counter. The term counter may sometimes be used to refer only to closed space, while partially enclosed spaces in m, n, or h are the aperture. The shape and size of the counter and bowl (curved stroke enclosing the counter) can affect readability and is also an identifying factor for some typefaces.

Also Known As: aperture | inner space | enclosed space

Open Counter - The partially open space within a character that is open on one end.

Aperture - The aperture is the partially enclosed, somewhat rounded negative space in some characters such as n, C, S, the lower part of e, or the upper part of a double-story a.

Also Known As: counter

Eye - Much like a counter, the eye refers specifically to the enclosed space in a lowercase “e.”

Also Known As: counter

Loop - In a double-story g, the loop is the enclosed or partially enclosed counter below the baseline that is connected to the bowl by a link. The enclosed or partially enclosed extenders on cursive p, b, l, and similar letters are also called loops. Both uppercase and lowercase cursive letters often have extra loops and flourishes. Sometimes the small curve or hook at the end of a j or q is called a loop although it really isn't.

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. Some sources call any parts of a letter enclosing a space a bowl, including both parts of a double-story g and the straight stem on a D or B. The curved strokes of a C are sometimes also referred to as bowls although they aren't closed.

Apex - The point at the top of a character such as the uppercase A where the left and right strokes meet is the apex. The apex may be a sharp point, blunt, or rounded and is an identifying feature for some typefaces.

Also Known As: top

Vertex - The outside point at the bottom or top of a character where two strokes meet.

Crotch - An acute, inside angle where two strokes meet.

THE ENDS

Serif - A stroke added as a stop to the beginning and end of the main strokes of a character. Serifs fall into various groups and can be generally described as hairline (hair), square (slab), or wedge and are either bracketed or unbracketed.

Bilateral Serifs - A serif extending to both sides of a main stroke. They are reflexive.

Bracket - A curved or wedge-like connection between the stem and serif of some fonts. Not all serifs are bracketed serifs. Brackets can have different shapes with deep or gentle curves. Brackets may taper all the way to the end of the serif or attach at a midpoint before the serif ends.

Spur - A small projection off a main stroke.

Beak - A beak is a type of decorative stroke at the end of the arm of a letter, connected to the arm by the terminal. Similar to a spur or serif, it is usually more pronounced.

Terminal - The terminal is a type of curve. Many sources consider a terminal to be just the end (straight or curved) of any stroke that doesn't include a serif (which can include serif fonts, such as the little stroke at the end of “n”). Some curved bits of tails, links, ears, and loops are considered terminals using the broader definition.

Finial - The part of a letter known as a finial is usually a somewhat tapered curved end on letters such as the bottom of C or e or the top of a double-story a. Another definition for finial is a swash or ornamental flourish, much like an extended serif, ascender, or descender, often added as a variation to some characters in a typeface.

Also Known As: terminal

Teardrop Terminal - The tear-dropped ends of strokes in letters of some typefaces.

Ball Terminal - Ball terminal is a combination of a dot (tail dot) or circular stroke and the curved bit (hook) at the end of some tails and the end of some arms (a, c, f).

EMBELLISHMENTS

Diacritic - Diacriticals are the accent marks used on some characters to denote a specific pronunciation. Rare in English, they are a common occurrence in French, German, Italian, Spanish, and other languages. Some of the more commonly seen diacriticals include acute, cedilla, circumflex, grave, tilde, and umlaut.

Also Known As: accents | accent marks

Dot - A small distinguishing mark, such as a diacritic on a lowercase i or j. When used as a diacritic mark, the term dot is usually reserved for the Interpunct (·), or to the glyphs “combining dot above” (·̇) and “combining dot below” (·̈) which may be combined with some letters of the extended Latin alphabets in use in Central European languages and Vietnamese.

Also Known As: Tittle.

Flag - The horizontal stroke present on the numeral 5.

Ligature - Two or more letters combined into one character make a ligature. In typography, some ligatures represent specific sounds or words such as the Æ or æ diphthong ligature. Other ligatures are primarily to make type more attractive on the page such as the fi and fl ligatures. Ligatures used to improve the appearance of type are usually character pairs or triplets that have features that tend to overlap when used together. The ligature creates a smoother transition or connection between characters by connecting crossbars, removing dots over the i, or otherwise altering the shape of the characters.

Quaint - An antiquated sort of glyph, used to recreate the typographic flavor of a bygone age.

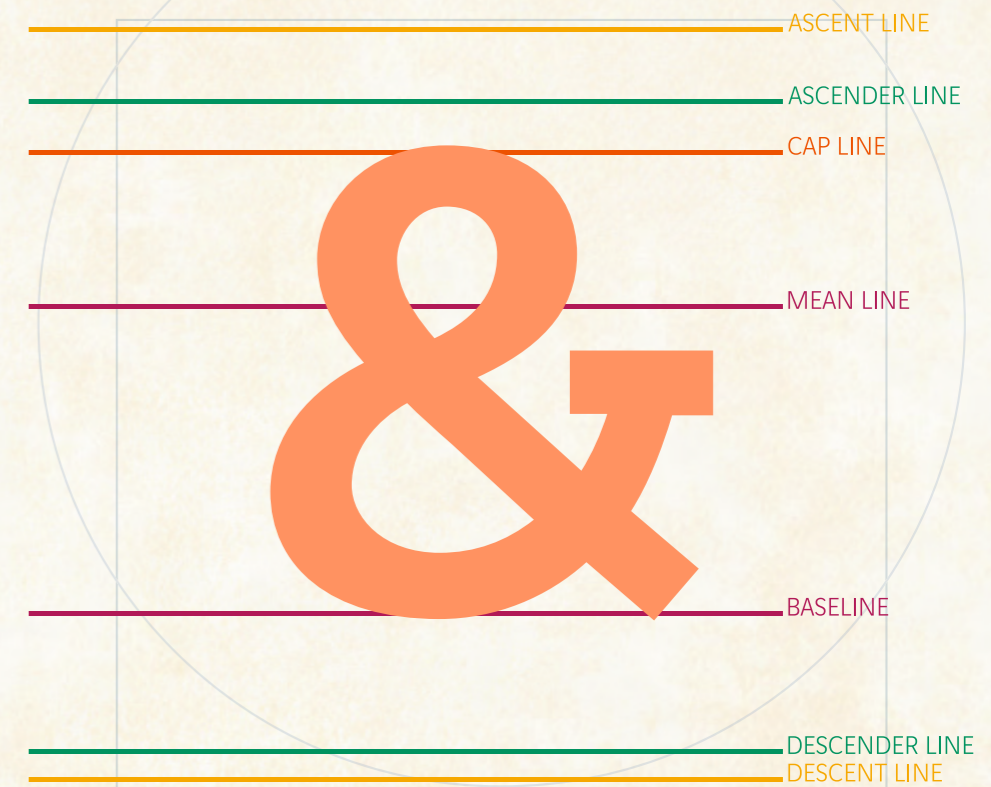
Tittle - A small distinguishing mark, such as a diacritic on a lowercase i or j.

Also Known As: Dot.

Swash - A swash is a typographical flourish on a glyph, like an exaggerated serif.

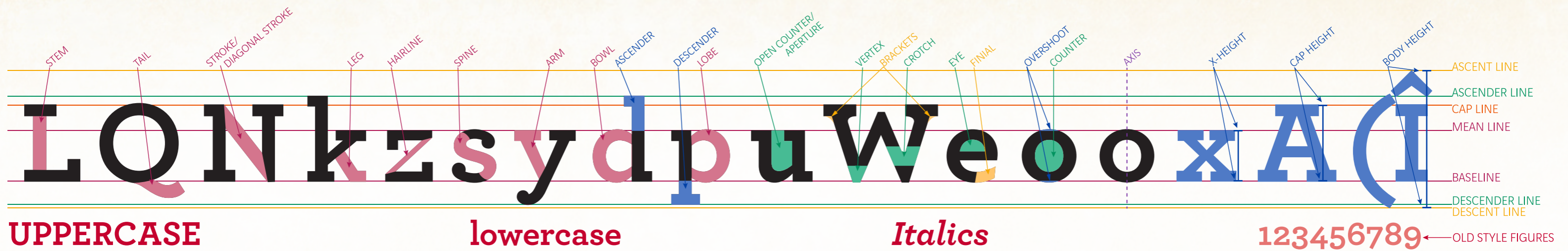
Capital swash characters, extending to the left, were historically used to begin sentences. Also minuscule swash characters -extending to the left to begin words, or to the right to end them- were used to help fit the text to the line, instead of spaces of varying widths (justification).

Some characters in ligatures were called swash characters, even though they did not protrude to the space on either side of the piece of type, such as the tail of a capital “Q” passing under its succeeding “u.” Similarly the tail of a swash “g” would extend to the left beneath a number of preceding letters limited by the set of ligatures the typographer chose for the set.



Ampersand - The typographic symbol used to designate the word and (&) is the Latin symbol for et which means and. The name, ampersand, is believed to be derived from the phrase “and per se and.” On a standard English layout keyboard the ampersand (&) is accessed with shift+7. In many fonts the ampersand looks much like a cursive S or a curly plus sign but in other fonts you can almost see the word Et in the design of the ampersand.

Also Known As: & | and



UPPERCASE

lowercase

Italics

123456789 ← OLD STYLE FIGURES

INVISIBLE LINES

Ascent Line - The invisible line marking the farthest distance between the baseline and the top of the glyph.

Ascender Line - The invisible line marking the height of ascenders in a font.

Cap Line - A line marking the height of uppercase letters within a font.

Mean Line - Imaginary line running along the top of non-ascending, lowercase letters. It falls at the top of many lowercase letters such as e, g and y and also at the curve of letters like h.

Also Known As: extender | tail | loop

Baseline - The imaginary line upon which a line of text rests. The descenders on characters such as g or p extend down below the baseline while curved letters such as c or o extend ever-so-slightly below the baseline. The baseline is the point from which other elements of type are measured including x-height and leading, and is significant in the alignment of drop caps and other page elements.

Descender Line - The invisible line marking the lowest point of the descenders within a font.

Descent Line - The invisible line marking the farthest distance between the baseline and the bottom of a glyph.

Axis - An imaginary line drawn from top to bottom of a glyph bisecting the upper and lower strokes. For typefaces that exhibit changes in the thickness of curved strokes, the inclination of the axis of the lowercase o is used to measure the angle of stress. A vertical axis indicates an angle of zero or vertical stress. When the axis leans to the left or right, it has angled (positive or negative) stress.

Also Known As: stress | angle of stress | design axis

HEIGHT & WIDTH

Body Height - The complete area covered by all of the characters in a font. The body height refers to the distance between the top of the tallest letterform to the bottom of the lowest one.

Cap Height - The height of a capital letter measured from the baseline. Cap height refers to the height of a capital letter above the baseline for a particular typeface. It specifically refers to the height of capital letters that are flat - such as H or I - as opposed to round letters such as O, or pointed letters like A, both of which may display overshoot.

X-Height - The x-height or corpus size refers to the distance between the baseline and the mean line in a typeface (i.e. excluding ascenders or descenders). The x-height is a factor in typeface identification and readability.

Typefaces with very large x-height relative to the total height of the font have shorter ascenders and descenders and thus less white space between lines of type and may appear darker, heavier, crowded, and more difficult to read at body copy sizes. Sans Serif typefaces typically have large x-heights. In typefaces with small x-heights, other letter parts such as ascenders and descenders may become more visually noticeable.

If changing to a typeface with a smaller x-height is not an option, open up the lines of type by adding more leading (line spacing), and not using fully justified alignment.

Also Known As: x-height | corpus size

Ascender - The upward vertical stem on some lowercase letters, such as h and b, that extends above the x-height is the ascender. The height of the ascenders is an identifying characteristic of many typefaces.

Also Known As: extender

Descender - The portion of some lowercase letters, such as g and y, that extends or descends below the baseline is the descender. The length and shape of the descender can affect readability of lines of type and is an identifying factor for some typefaces.

Also Known As: extender | tail | loop

Overshoot - Formally, it is the degree to which capital letters go below the baseline or above the cap height, or to which a lowercase letter goes below the baseline or above the x-height.

CASES & FORMS

Lowercase - The little letters or non-capital letters of the alphabet are lowercase glyphs. They make up the bulk of written text, with uppercase or capital letters used primarily only to start sentences or proper names.

Also Known As: l.c. | little letters | small letters

Uppercase - The capital letters of the alphabet are uppercase glyphs. Uppercase letters are normally used at the beginning of sentences and as the first letter of proper names.

Also Known As: capitals | capital letters | caps | big letters

Italics - While roman typefaces are upright, italic typefaces slant to the right. But rather than being just a slanted or tilted version of the roman face, a true or pure italic font is drawn from scratch and has unique features not found in the roman face.

Also Known As: oblique | tilted | slanted

Old-Style Figures - Style of Arabic Numerals where the characters appear at different positions and heights as opposed to the modern style of all numerals at the same size and position are called Old Style Figures. Some Old Style figures sit entirely above the baseline while others (such as the tail on the numeral 9) descend below the baseline. Often Old Style Figures are available only in Expert Character Sets although some fonts may come with both Old Style Figures and Lining Figures (those that sit on the baseline).

Also Known As: ornamental figures | old style numerals | non-lining

THE STROKES

Stroke - The main diagonal portion of a letterform such as in N, M, or Y is the stroke. The stroke is secondary to the main stem(s). Some letterforms with two diagonals, such as A or V have a stem (the primary vertical or near-vertical stroke) and a stroke (the main diagonal). Other letter parts such as bars, arms, stems, and bowls are collectively referred to as the strokes that make up a letterform.

Stem - Vertical, full-length stroke in upright characters.

Also Known As: stroke

Arc of Stem - A curved stroke that is continuous with a straight stem.

Hairline - In typeface anatomy, a hairline is the thinnest stroke found in a specific typeface that consists of strokes of varying widths. Hairline is often used to refer to a hairline rule, the thinnest graphic rule (line) printable on a specific output device. Hair or hairline is also a type of serif, the minimum thickness for a serif.

Also Known As: hair stroke

Hook - A curved, protruding stroke in a terminal. Usually found on a lowercase f.

Diagonal Stroke - An angled stroke.

Arm - The arm of a letter is the horizontal stroke on some characters that does not connect to a stroke or stem at one or both ends. The top of the capital T and the horizontal strokes of the F and E are examples of arms. Additionally, the diagonal upward stroke on a K is its arm. Sometimes arm is used interchangeably with bar or crossbar or cross stroke. Arm is often also used to describe the mostly horizontal top stroke of C, double-story a, G, and other glyphs, to include the finial, terminal, spur, or other elements of the stroke.

Also Known As: crossbar | cross stroke

Bar - The (usually) horizontal stroke across the middle of uppercase A and H is a bar. The horizontal or sloping stroke enclosing the bottom of the eye of an e is also a bar. Although often used interchangeably, the bar differs from an arm and a cross stroke because each end connects to a stem or stroke and doesn't (usually) intersect/cross over the stem or stroke. The varying positioning, thickness, and slope of the bar is an identifying feature of many type designs.

Also Known As: crossbar | arm | cross stroke

Crossbar - The horizontal stroke in letters.

Also Known As: bar | arm | cross stroke

Cross Stroke - The horizontal stroke across the stem of a lowercase t or f is a cross stroke. Although often used interchangeably, the cross stroke differs from an arm and a crossbar because it intersects/crosses over the stem. The varying positioning, thickness, and slope of the cross stroke is an identifying feature of many type designs.

Also Known As: arm | crossbar

Ear - Typically found on the lower case g, an ear is a decorative flourish usually on the upper right side of the bowl. Similar to a serif, the ear can be a distinctive, identifying element of some typefaces.

Lobe - A rounded projecting stroke attached to the main structure of a letter.

Shoulder - The curve at the beginning of a leg of a character, such as in an "m."

Spine - The spine is the main left to right curving stroke in S and s. The spine may be almost vertical or mostly horizontal, depending on the typeface.

Leg - The lower, down sloping stroke of the K and k is called a leg. The same stroke on R as well as the tail of a Q is sometimes also called a leg.

Also Known As: tail

Link - In typeface anatomy, the link is that small, usually curved stroke that connects the bowl and loop of a double-story g.

Also Known As: neck | terminal

Tail - The descending, often decorative stroke on the letter Q or the descending, often curved diagonal stroke on K or R is the tail. The descender on g, j, p, q, and y are also called tails.