

# A BRIEF GUIDE TO BASIC TYPOGRAPHY

## ANATOMY



## HISTORICAL CONSIDERATIONS

When selecting a typeface for a project, it is important to be aware of its art-historical and aesthetic associations. Thinking about the artistic and historical climate in which the type was made can help you make an educated decision about whether it is suitable for the text and the design. This is especially useful if you are trying to give your project the feeling of a certain time period or a definite tone.



**HUMANIST/OLD STYLE:** The roman typefaces of the fifteenth and sixteenth centuries emulated classical calligraphy, the wedge-shaped serifs and oblique axis recalling the broad-nibbed pen. However, as printing became commonplace, the letters became more graceful but less organic.

**TRANSITIONAL:** As typefaces began to stray from their written roots, new, drafted letters emerged with sharper serifs, a more vertical axis, and a more pronounced difference between thicks and thins (contrast).

**MODERN:** The typefaces designed by Bodoni in the late eighteenth and early nineteenth centuries were radically abstract. Note the thin, straight, hairline serifs; vertical axis; and sharp contrast from thick to thin strokes.

**SLAB SERIF:** Numerous bold and decorative typefaces were introduced in the nineteenth century for use in advertising and other ephemera. Slab serifs retain the verticality and abstractness of the modern style, but reduce the contrast until the serif is almost as thick as its stem. That way, the serifs would survive the cheap printing process of the time.

**GROTESQUE:** Originally intended only for display in all uppercase letters, foundries cut off the serifs of the slab serif design, leaving an extremely low-contrast letterform without stroke endings. As this style evolved, a lowercase was added and it began to be used for text. In the 1950s, this style was revived and refined in Helvetica, which remains one of today's most popular faces because of its upright uniformity and lack of expressiveness.

**GEOMETRIC SANS SERIF:** As modern artists became interested in geometric purity, some sans-serif types were built around geometric forms. In Futura, the *O*s are nearly perfect circles, and the peaks of the *A* and *M* are sharp triangles.

**HUMANIST SANS SERIF:** Emerging concurrently with their geometric counterparts, humanist sans serif typefaces incorporated calligraphic variations in line weight and axis.

The typographic color of this textblock is much darker than the one below. It uses a lower-contrast font and less leading between lines.

HAETTENSCHWEILER

The typographic color of this textblock is much lighter than the one above. This is due to a higher-contrast font and more leading between lines.

BASKERVILLE OLD FACE

Too little leading between lines can cause ascenders and descenders to practically touch, making your reader feel cramped and uncomfortable.

Too much leading between these lines forces the eye to jump across vast seas of open whitespace.

AVOID Tofu  
WITHOUT KERNING  
AVOID Tofu  
WITH KERNING

An example of **RIGHT ALIGNMENT**.

It is difficult to read in long passages because the eye has to search for the beginning of each line.

An example of **LEFT ALIGNMENT**. It is good for setting long or short blocks of text, especially in thin columns.

This is an example of **FULL JUSTIFICATION**. It is good for setting long blocks of text and creates the feeling of a solid text block on the page. However, in thin columns, gaps in word spacing can create uneven color.

“Note how the punctuation hangs into the margin when the margin is optically aligned.”

## HEADLINE Headline

With similar structures and x-heights, this sans serif/serif pair could compliment each other nicely.

FF MILO AND WARNOCK PRO

*Headline*

Since this text font is radically different than the script font in the headline, the two create an interesting contrast.

BICKHAM SCRIPT AND ADOBE GARAMOND

## DESIGN CONSIDERATIONS

**TOPE:** Typeface selection and typography can greatly affect the tone of a piece. Old-style fonts can give your project a classic, formal look. Geometric sans serif fonts are likely to shout sleek and modern. Slab and sans serif fonts can be informal and colloquial. The organic shapes in calligraphic fonts can add warmth and charm. That said, the tone of the page depends more on how type is used than on the font itself. Remember: typography does not have to be overdone to look good.

**COLOR:** Spacing concerns and the typeface itself affect what is known as typographic color. It is not a color with any hue, but rather the gray value, or density, of a mass of type on a page. In addition to the typeface itself, color is determined by line spacing (leading), word spacing in justified text, and character spacing (tracking). A page may have light or dark color, but the typographer's aim is always to keep the color on the page consistent to aid readability.

**BODY TEXT:** Extended blocks of text, or body copy, are written (presumably) with the intention of being read. Choosing the wrong font can make a section of text harder to read. Generally, serif text fonts are dramatically easier to read than sans serif fonts. Long lines are hard to read; generally, set lines at 55 to 60 characters or break your text up into columns.

**LEADING:** Leading is the vertical distance between lines of type and is measured in points. Too much leading causes the eye to jump from line to line and is disruptive to reading. Too little leading creates dark, uninviting color that may cause the eye to skip a line when scanning to find the next one. You will find that long lines and lines set in sans serif type tend to require more leading to be readable.

**TRACKING & KERNING:** Tracking, or letterspacing, pads each letter with equal space. Since the spacing of capital letters is designed to work together with the lowercase, you may have to track out titles set in all caps or small caps. In the United States, it is not common to track out lowercase letters. Awkward spacing between letters can be fixed by manually kerning the pair closer together; however, most fonts come with kerning tables to automatically address the problem pairs.

**ALIGNMENT:** Body text can be aligned to the right, aligned to the left, or fully justified. Right aligned text should be used sparingly for captions and short bits of text. Both left-aligned and fully-justified text are suitable for body text, however the former tends to be less formal than the latter. While words are evenly spaced when aligned to the left or right, word spacing problems arise in full justification when the text block is too thin or when hyphenation is disabled. In most cases, enable Optical Margin Alignment to give the appearance of an aligned textblock.

**HEADLINES:** You have many more options in style and flavor when choosing fonts for headlines. While headlines must be legible and reasonably easier to read, headlines allow you to address the publication's style, content, and tone more directly. Studies show that there is virtually no difference in readability between serif and sans serif type in headlines; however, headlines that are set in capitals are significantly harder to read than those of mixed case. When your project calls for something unique and eye-catching, decorative and display fonts may succeed in attracting attention where text faces fail.

**SCREEN:** The above facts are true on print, but screen typography is a whole different ball game. In fact, the opposite is true on the screen: sans serif fonts with large x-heights are generally considered to be the easiest to read on websites. Hinted typefaces have been adjusted to align with the screen's pixel grid, and are much easier to read than auto-hinted fonts.

**COMBINING TYPEFACES:** One of the most important things you can do as a typographer is establish a hierarchy on the page. Using different typefaces to represent various levels of information is often a good strategy when one typeface isn't enough. Typefaces can form good relationships either by complimenting or contrasting with each other. Matching complimentary typefaces (usually a sans serif with a serif) requires close examination of the

x-height (see below), the letters' proportions, shapes, and quirks. Often, large font families have matching serif and sans faces that were designed to be used together. Choosing two radically different typefaces can be equally as rewarding, creating a stark contrast on the page. However, you must be careful not to create a conflicting relationship between your fonts. This often occurs when there are too many fonts on a page; you rarely need more than two. Problems also occur when fonts are too similar; avoid using two fonts that fit into the same category.

## TECHNICAL CONSIDERATIONS

**X-HEIGHT:** Traditionally, x-height is the height of the lowercase letter *x*. It affects the feel of a typeface, how many characters fit on a line, and depending on how the type is set, how easily your text can be read. At very small point sizes, a font with a larger x-height is easier to read, everything else being equal. However, a smaller x-height (and the longer ascenders that result) often adds to a type's elegance.

**ITALIC:** Most roman typefaces come with an *italic* counterpart that was designed to work with the roman. In most cases, these letters are based on a cursive form, but some sans serifs italics are simply an adjusted obliqued roman. Either way, use the italic typeface provided and avoid obliquing the letters in your design program (faux italics). If you anticipate having long captions or quotations that need to be set in italic, make sure that the italic face is easy to read, not too slanted, and definitely not too frilly. At the same time, more cursive italics can give points of emphasis some liveliness and excitement, but only if you use them sparingly.

**WEIGHTS:** Most roman typefaces also come with a **bold** variant. Note that this is a separately designed font, the letters reworked to function at a heavier weight; avoid using a design program to inflate the letters for you. Larger type families have been designed to include variation in weight from ultra light to ultra black. Weight is a good way of differentiating type while keeping it the same size; however, text too light or too dark will create uneven color on a page. In fact, using **semibold** (or even *italic*) instead of bold will often get the job done without such a disruption.

**WIDTHS:** Larger type families also come in a variety of widths, from ultra-condensed to ultra-expanded. They keep the same proportions as the regular letters, and are much more pleasant and readable than letters that have been stretched or squeezed with a design program. When it is necessary to make a given amount of type fit into a predetermined space, using a large type family with a condensed or extended version of a typeface can be a real lifesaver.

**EXTENDED CHARACTER SETS:** Make sure that the font that you select has all of the characters that you will need in the text, including any accents, diacritics, or special punctuation. Some Latin fonts also come with Greek and Cyrillic character sets. Be sure to use "curly quotes" for quotations instead of "dumb quotes," which are intended for certain measurements such as feet, inches, minutes, and seconds.

**SMALL CAPITALS:** If you are working with a fair amount of text, it is necessary to have a typeface that has a small-cap design as well. Small caps are not shrunken capitals, but a shorter, stouter set of capitals slightly taller than the x-height. Do not let your design program shrink capitals, they will always look puny and starved. **SMALL CAPS** are a good substitute for **ALL CAPITAL** letters when needed in body text. Small caps often look best with a bit of tracking.

**FIGURES:** While the lining figures that appear by default in most fonts work well in all caps, they stand out when set in text. If you are setting text, it is wise to choose a font with a set of old-style figures that comply with the lowercase x-height and appear seamlessly within text. In addition to proportional figures with varying widths, some fonts also have tabular figures that all share the same width, perfect for setting in columns and charts.

## Headline

These fonts may conflict because they are too similar.

ADOBE CASLON AND TIMES NEW ROMAN

## Headline

This pairing of two beautiful script fonts should make you want to die.

BICKHAM SCRIPT AND CAFLISCH SCRIPT

TIMES NEW ROMAN (30pt)

x-height x-height

ADOBE GARAMOND (30pt)

*italic italic italic*

TRUE ITALIC

*italic italic italic*

FAUX ITALIC

Light **Bold**  
Regular **Black**  
Semibold

MYRIAD PRO

Condensed Myriad  
Regular Myriad  
Semiextended Myriad

á ж ξ π ñ þ ß “ ”

The **USA** wants

The **USA** wants

96.125 kilometers

96.125 KILOMETERS

OLD-STYLE FIGURES

LINING FIGURES

196	196	196	196
1208	1208	1208	1208
35	35	35	35

PROPORTIONAL TABULAR PROPORTIONAL TABULAR

**LIGATURES:** Certain letter combinations can cause collisions, or at least near-misses, that hamper readability. To solve this, many typefaces come with stylistic ligatures, or two independent letters that are connected to form one glyph. Common ligatures are ff, fi, ffi, fl, fll, and Th. Programs like InDesign will try to automatically replace problem combinations with available ligatures, but will not always be able to in older fonts. A simple find and replace will do the trick. Some fonts based on historical models also come with discretionary ligatures such as ct, st, and sp: should be used sparingly.

**SWASH:** If you are looking to add some exuberance to your project, consider a face that has an alternate swash alphabet in addition to the italic. This alphabet has flourishes that can add a great deal of excitement to a boring page. They should hardly ever be used, however, and only with certain letters within a word (usually the first or last).

**ORNAMENTS:** Typefaces often come with decorative ornaments. A single consistently used graphic element can add flavor to your project and highlight key points. Instead of the standard bullet, look through the ornaments in your font or in other symbol faces for one that matches your message. If you keep ornamentation clean and simple, it will add interest to your project without cluttering it.

**OPTICAL SIZES:** High-quality typefaces have always had different designs depending on the point size of the text to be set. In the days of metal type, each point size had its own unique design that was specifically tailored for its usage. Some digital typefaces mimic this with optical size variations such as caption, subhead, and display. The smaller sizes are thicker with more spacing while the larger sizes are lighter and more condense (see right). However, when used at their intended size, opticals help create a balanced page.

**FORMAT & ENCODING:** There are three formats of outline fonts that are commonly available: PostScript, TrueType and OpenType fonts. The PostScript and TrueType formats were competing font formats that worked differently on Windows and Macs. The new OpenType format is cross-platform and supports Unicode, an international encoding standard encompassing virtually all of the world's languages. OpenType fonts are "smart" in that they can work together with design programs such as InDesign to offer advanced typographic features that allow proper typographic treatment of complex scripts and advanced typographic effects for simpler scripts.

**LICENSE & EMBEDDING:** Since fonts are essentially pieces of software, each one comes with an End User License Agreement (EULA) that dictates how and by whom the font can be used. While it is not crucial to your academic work, knowing the limitations of your license will help you avoid EULA hoops once you are working professionally and sending files to clients, supervisors, and printers. Some fonts can be embedded in a PDF or supplied to printers in an InDesign package for temporary use, while others cannot.

## FINAL NOTES

**ECONOMY:** With so many options at your fingertips, it is often hard to remember that a simple, straightforward design often serves the content best. Use only as many fonts as you need. There is no need to make a title big, pink, bold, italic, and all-caps when one variation would suffice. Carefully and consistently handle the typographic elements; the difference between an amateur- and a professional-looking document can be in a matter of details.

**EXUBERANCE:** While always maintaining consistency, don't let your design become visually boring. Find important details worthy of elaboration. Drop caps, lead-ins, and ornaments can be visually inviting. Or, simply consider the expressive range of the ampersand.

**MARKING THE PAGE:** Traditionally, typography has been seen as a crystal goblet, something that is subtly designed to *reveal* rather than hide the beautiful thing that it contains (Beatrice Warde). However, in information design, typography often must reject this passive role to better communicate information, using proximity, alignment, repetition, and contrast to actively organize and govern myriad elements on a complex page.

office office  
reflect reflect

Avalon  
WRONG

✿ TITLE ✿

Display (25-72 pt)  
Subhead (14-24 pt)  
Regular (9-13 pt)  
Caption (8-6 pt)

Display  
Subhead  
Regular  
Caption

**CREDITS:** This tabloid was put together in September 2006 by Information Design student David Jonathan Ross and edited by Emily Richardson. It is set in Garamond Premier Pro and borrows quite liberally from Adobe's *Typography Primer* ([www.adobe.com/education/pdf/type\\_primer.pdf](http://www.adobe.com/education/pdf/type_primer.pdf)) and Ellen Lupton's *Thinking With Type* ([www.thinkingwithtype.com](http://www.thinkingwithtype.com)).

### FURTHER READING:

Bringhurst, Robert. *The Elements of Typographic Style*. Point Roberts, WA: Hartley & Marks, 2004.  
Lupton, Ellen. *Thinking With Type*. New York: Princeton Architectural Press, 2004.

