# Understanding typography concepts

This guide explains concepts used in typography, including:

- Serifs
- Font sizing
- Leading

- Kerning
- Tracking
- Baseline shift

# Serif and sans serif text

*Serifs* are the short lines at the ends of characters. Many design theorists believe that serifs help move the eye across the page (almost all print had serifs until the twentieth century.)

Fonts are either serif (Figure 1) or sans serif—without serifs (Figure 2).



Figure 1 Serif font



Figure 2 Sans serif font

When designing headings, you can choose either serif or sans serif font families. For body text, consider the following:

- Serif fonts can be easier to read in print.
- Sans serif fonts can be easier to read online.

Serif fonts can be easier to read when printed because serifs help readers make clearer distinctions between letters. Think about capital "I" and lowercase "L." Without serifs, readers might confuse these:

Capital "I" in Arial 24 point	
Lowercase "L" in Arial 24 point	

As you may know, though, computer monitors show headings at a much lower resolution than print—often no larger than 96 pixels per inch as compared to print's 300 pixels per inch. With such low resolution, serifs become fuzzy, usually making text harder to read. (In fact, some fonts have been designed to overcome the limitations of online display. Verdana is one of these.)

# Font sizing

Fonts are sized in *points*—there are 72 points to an inch. Your choice of font size depends on the use of the text and, in particular, whether it is body text or a heading.

*Body text* is anything that's longer than a line or two. Body text needs to be very readable. You may want to consider sizing body text according to audience. Although younger readers are usually comfortable reading text as small as 6 or 7 points, readers over 25 may have a hard time reading text that is sized below 10 points (text blocks start to look too dark with small font sizes). On the other hand, going too large presents its own problems. When you size fonts above 14 points, blocks of text may appear too light, making them hard to read on a prolonged basis.

For headings, use a size at least two points larger than the body. How large you go is up to you—this is a design decision that depends on your layout and design goals. With all headings, you generally want contrast between the heading and body text. Such contrast helps create hierarchy between levels of information.

### Leading

Leading is the space between lines of text. (The term is pronounced "led-ing," after the strips of lead used to separate lines of type.)

Leading	Principles,
	Goals, and
	Techniques for
W	orking with Text

Figure 3 A 14-point font with 16.8-point leading

Too little leading can make a block of text appear too dark and difficult to read. Too much leading, on the other hand, can make text appear too light and similarly difficult to read. You can experiment with different leading to see what works for you; your goal is to strike a balance between too little leading and too much leading.

For body copy, many designers use a leading of at least the font size plus 2 points. For example, if body text is set in a 12-point font, you could set leading to 14 points. Most layout programs, including Adobe InDesign, apply this leading by default.

For headings, especially headings in all capital letters, you can apply leading more liberally. Adjusting leading produces different design effects (**Figure 4**).

- For headings, you should adjust leading manually.
- With all-caps, you can decrease leading down to almost nothing with little loss in legibility, as in Figure 4.





Figure 4 Examples of leading and headings

# Kerning and tracking

Kerning and tracking both address the spacing between letters. *Kerning* refers to the space between any two letters in a line. *Tracking* refers to the space between *all* of the letters in a line.

#### Kerning

In the past, computer-generated text left gaps between letter pairs that naturally create spacing. These letter pairs include Pa, Ta, We, and Yo.

The gap between these letters is larger than the gap between other letter pairs, such as "na."

Modern software (including Adobe InDesign) corrects kerning for you.

- Metrics kerning automatically adjusts the space between a set of letter pairs defined for each font.
- Optical kerning automatically adjusts the space between letters based on their shapes.

By default, InDesign applies metrics kerning to your text. *Metrics kerning* automatically adjusts the space between letters so letter pairs that produce gaps—such as Pa, Ta, We, and Yo—have spacing consistent with letter pairs that do not produce gaps. These letter pairs are called *kern pairs* and are included with most fonts.

For fonts that do not include such pairs (which is rare), you can also use another kind of automatic kerning called *optical kerning*. *Optical kerning* adjusts the space between letters based on their shapes. Optical kerning is also useful when you use two different typefaces or sizes in one or more words on a line.

You might also want to adjust kerning manually. Usually, audiences will only notice kerning-related gaps in large font sizes (**Figure 5**). Some designers also use kerning to achieve the effect of tightly spaced letters. (Tight kerning was especially popular in the immediate postwar period, from 1950–1980. If you've seen advertisements from that era, you may recall headings with letters that were tightly spaced.)



Manual kerning applied

Figure 5 Manual kerning applied

#### Tracking

*Tracking* refers to the space between characters across a line of text. Adjusting tracking produces letters that are spaced further apart. (Usually, you do not want to reduce tracking unless you've already increased it. If you reduce tracking too much, text appears too dark to many readers.)

Tracking is measured in 1/1000 em. *Em* is relative to the current type size. In a 12-point font, 1 em equals 12 points; in a 10-point font, 1 em equals 10 points. To give characters dramatic spacing, you need to enter fairly high numbers in the Tracking box—at least 300.

Positive tracking increases the space between letters (**Figure 6**). Negative tracking decreases the space between letters.

# NORMAL TEXT POSITIVE TRACKING NEGATIVE TRACKING

Figure 6 Examples of tracking

#### **Baseline shift**

A font's baseline is the lowest point of letters except those that extend below the baseline, such as "y" and "g."

You can use baseline shift to adjust the baseline for one or more characters, either to create an effect or to format special symbols such as the trademark symbol. The gray characters in **Figure 7** have been adjusted.



Figure 7 Examples of baseline shift applied