

Creating Accessible Documents in Word

How to Topic 09: Fonts

This document complements the video
Creating Accessible Documents in Word – Part 9: Fonts available at:
<https://laudatotech.com/resources/>



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Using Fonts

Wiktionary defines a font as:

*A set of glyphs of unified design, belonging to one typeface (e.g., Helvetica), style (e.g., italic), and weight (e.g., bold). Usually representing the letters of an alphabet and its supplementary characters.*¹

Issues associated with font selection are not of concern for the totally blind, who rely on screen readers, but are a concern for those with low or limited vision.

FONT TYPEFACE

Typeface refers to the design of the lettering, or the *font family*, such as:

Calisto MT (the main font used in this document)
Arial
Times New Roman
Century Gothic

Microsoft Office is delivered with about 70 different fonts. Other installed applications, such as *Adobe Creative Suite*, add to that number.

Some fonts can be very difficult to read for people with vision problems and should consequently be avoided. Some examples of complex, condensed, or “busy” font families include:

ALGERIAN 12 POINT.

Bauhaus 93 12 point.

Bodini MT Poster Compressed 12 point.

Brush Script MT 12 point.

SHOWCARD GOTHIC 12 POINT.

Snap ITC 12 point

FONT WEIGHT

Weight refers to the boldness or lightness of the font. The following examples from Microsoft Word’s Gill font family illustrate the differences in weight, all represented in the same size:

Gill Sans MT
Gill Sans Condensed
Gill Sans MT Ext Condensed Bold
Gill Sans Nova
Gill Sans Nova Cond
Gill Sans Nova Cond Lt
Gill Sans Nova Cond Ultra Bold

¹ <https://en.wiktionary.org/wiki/font#English>

Gill Sans Cond XBd

Gill Sans Nova Light

Gill Sans Nova Ultra Bold

Gill Sans Ultra Bold

Gill Sans Ultra Bold Condensed

Some of these font weights, particularly at the extreme ends (condensed, thin, and bold) may present problems to individuals with low vision.

FONT SIZE

Font size is measured in *points*. Each point represents about 1/72 of an inch in height. An inch in height therefore provides enough room for about six lines of 12-point type, single spaced.

Calisto MT - 8 point

Calisto MT - 10 point

Calisto MT - 12 point

Calisto MT - 14 point

Calisto MT - 16 point

Calisto MT - 18 point

Calisto MT - 24 point

Generally, a 12-point font is the best choice for readability in a document created in Microsoft Word or in a PDF. Smaller sized fonts may present difficulties to individuals with low vision. For headings, 14- or 16-point fonts are generally appropriate. In Microsoft PowerPoint, many seasoned presenters recommend using at least 24-point fonts, providing from seven to nine lines of type per slide.

Font size is important to readability and is tied to typeface design. For example, observe the size differences between the following typefaces, all rendered in 12-point fonts:

ABCabc123

Arial

ABCabc123

Biome

ABCabc123

Calibri

ABCabc123

Candara

ABCabc123

Tahoma

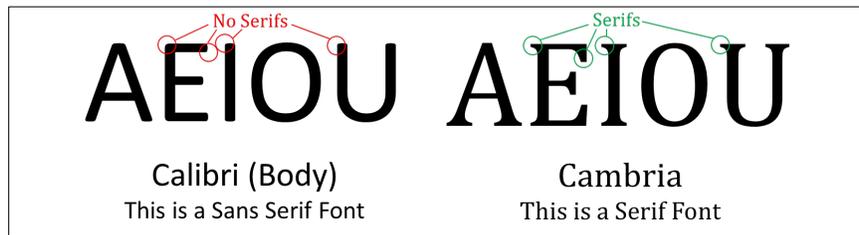
ABCabc123

Verdana

SERIFS

Another important attribute of a font is whether the typeface includes a *serif* or not. Serifs are the small extra embellishments that appear at the ends of some letter components. Fonts without such embellishments are referred to as *sans serif* fonts.

Figure 1: Sans Serif versus Serif Fonts



Early research in typography indicated that serif fonts, when printed on a high-quality offset press, were easier to read and enabled better retention of the content than sans serif fonts. Theoretically, this is due to the extra information in the font face that makes it easier for the eye to quickly recognize letters. Serifs also help avoid the ambiguity between certain sans serif letters such as lower case “L” (l) versus upper case “i” (I) and to recognize the difference between a letter sequence such as “rn” and the letter “m”.

When low-resolution computer screens and printers came into play, the simpler sans serif fonts were typically judged to be superior because they presented a “cleaner” and simpler dot pattern. Consequently, many people recommended the use of sans serif fonts for better readability. With today’s high-resolution screens, the pendulum seems to be swinging back in the direction of serif fonts.

The following boxed paragraph illustrates the difference between the *Candara* sans serif font (on the left) and the *Calisto MT* serif font (on the right) at various font sizes.

This is a sans serif font.	This is a serif font. (18 point)
This is a sans serif font.	This is a serif font. (14 point)
This is a sans serif font (Candara).	This is a serif font (Calisto MT). (12 point)
This is a sans serif font.	This is a serif font. (10 point)
This is a sans serif font.	This is a serif font. (8 point)

Opinions differ as to whether serif or sans serif fonts are a better choice for readability, retention, and accessibility. Recent research indicates it is a toss-up. This author selected (and recommends) the *Calisto MT* serif font for body text and often selects sans serif fonts, such as *Calibri*, for headings.

FONT WIDTH

Fonts are either of fixed- or proportional width. Fixed-width fonts, used by early typewriters and computer screens, provide the same horizontal space (font width) for every letter. For example, a lower-case “i” takes as much width as a capital “W.” Proportional-width fonts vary the amount of horizontal space each character takes, so a lower case “i” takes significantly less space than a “W.” For example:

Fixed-width	WWW	iii	(Lucida Sans Type)
Proportional	WWW	iii	(Lucida Sans)

Additional examples are shown below.

Fixed-width	Million Weeping Willow	(Lucida Sans Type)
Proportional	Million Weeping Willow	(Lucida Sans)

Fixed-width	Million Weeping Willow	(Courier New)
Proportional	Million Weeping Willow	(Century)

Another font concept is *kerning*. Kerning adjusts the spacing between certain letters that, because of their relative orientation, appear farther apart than normal. For example, because of their shapes, when “W,” “A,” and “T” are sequenced, the gap between the “W” and “A” and the “A” and “T” seems excessive. Kerning reduces this gap.

WATER is not kerned.

WATER is kerned.

Kerning should not have a significant impact on font selection.

SUMMARY

When selecting fonts for readability and accessibility, select standard fonts, i.e., fonts not excessively ornate, bold, thin, or condensed.

Font size is important to readability and is tied to typeface design. In general, select at least a 12-point font for documents (Word and PDF’s) and at least a 24-point font for PowerPoint.

Use your own personal preference and aesthetic sense when selecting serif versus sans serif fonts.

Remember to provide sufficient contrast between the font and its background.