

# Accessible Print

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# What is Accessibility?

- The things we make should be usable by as many people as possible, subject to inherent limits of the medium;
- More than half of people have “special needs” around accessibility; they are not “special needs”, they are “majority needs”.

# Text Sizes

- Text smaller than 11pt is going to be difficult for many people to read, or off-putting. Smaller than 9pt and many (most) likely won't read it at all.
- A large x-height helps.
- It depends on reading distance; you need about  $0.2^\circ$  of vision for the x-height [1]. This typically means 9 or 9.5pt.

# Text Contrast

- Ratio between text foreground and background lightness; in print it depends on the colour, texture, glossiness of the paper as well as on ink darkness, colour choices, and ambient lighting.
- Smaller text sizes usually need more contrast.

# Colours

- Some 8% of men, 0.5% of women, see reds and greens as browns, or red as black, or some other colours, and more than half are unaware.
- Keep in mind the consequences of people not seeing the different colours in your document.

# Dark Mode

- In print, thin light-coloured lines on a dark background get eaten away, so you need to use bold fonts and sometimes letter-spacing, depending on how much the ink spreads (“dot gain”).
- Small sizes of text over a coloured background can also be hard to read because of the dot screen process and the danger of misaligned colours. Talk to the printing house.

# Typeface

- English-language studies show clearly people read serif fonts better than sans, remember more of what they read, and understand better.
- Garamond is the most *trusted* typeface!
- Slightly irregular fonts help dyslexic people; specialist dyslexic fonts hinder other people.
- Keep unusual letter shapes to large sizes; people may have to puzzle them out slowly.

# Line Length

- People read fully-justified text better than left-aligned, and in studies understand more [2].
- Regular (equal) line lengths & good word spacing (1.2 to 1.5 of font size) lead to the highest comprehension, but at line lengths over 50 characters or so, people start mis-reading.
- Use hyphenation to keep word spaces even.



# Wayfinding

- Running heads / footers, chapter openings...
- Use headings to give context.
- Section transitions can usefully be marked with an initial cap or a rule (line) if there is no title.
- People need constant clear reminders about where they are.

# End Notes, Links

- Don't make people flip pages: use margin notes or footnotes.
- Use different footnote markers for explanations and for citations to references.
- Cross references: See Chapter 16 (A Holiday in Moria) on page 96.
- Make sure page numbers are easy to see and read and are near the outside edge of a book.

# Resources

- <https://jov.arvojournals.org/article.aspx?articleid=2191906>  
reports findings on text sizes very usefully
- Colin Wheildon, *Type & Layout* is written from an advertising perspective, but mentions many of the studies of readability & understanding.
- <https://www.colourblindawareness.org/>