
Design & Layout Basics

The Role of the Desktop Designer

- To complement the work started by the writer.
- To add a visual dimension to the text, not draw attention to the design itself.
- To create a design that gets reader attention and projects an image.

Questions to Consider Before you Design

1. What is the purpose of your publication? Why is it needed? (mandatory or pleasure reading)
2. Who is the target audience? (What age, educational level, what attitudes or opinions)
3. What kind of information will the publication include?
4. What kind of image do you want to project? (classy, serious, formal, informal, etc.)
5. What is the budget?
6. How will the publication be reproduced?
7. How will it be distributed?
8. When is it needed?
9. What kinds of art or photography and how much will be needed?
10. What will the time table be for:
 - Articles or copy being written
 - Photography/artwork time requirements
 - Production or assembling of all information
 - Printing
 - Mailing

Conditioning Yourself to Good Design

- Learn the basic rules of design.
- Look for good examples and keep a file of good design ideas or layouts you can use later for inspiration, or as a starting point for modification.
- Become an observer and learn to think visually.

How to begin? Design the Grid.

Begin every publication by establishing the master grid. The grid, among other elements, includes these basic details:

- The page size (example: 7 in. x 9 in. or 8.5 in. x 11 in.)
- The margins (outside, inside or gutter, top and bottom)
- The number of columns on a page (2-column, 3-column or more)
- The standard typeface and size for headlines, subheads, body text, captions or other special text.

Eight Basic Design Rules

1. Use a grid base design.

Plan it out, then follow it as you plan your publication.

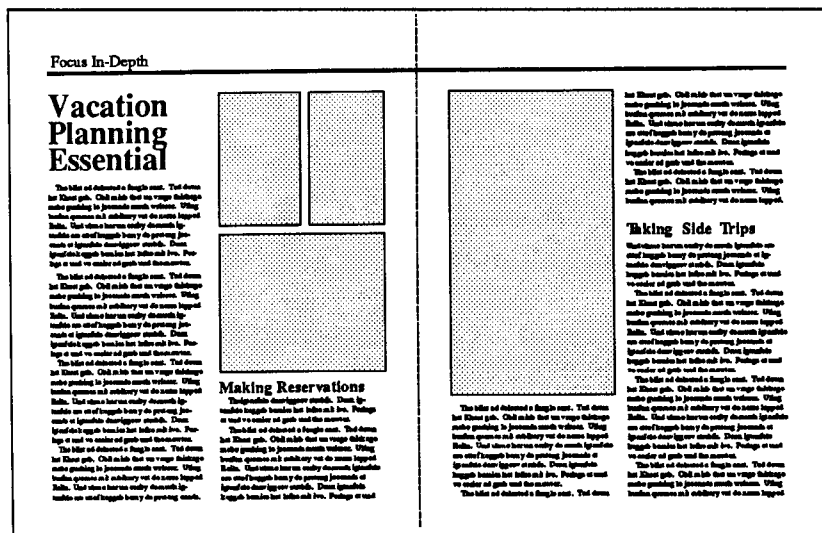


Fig. 1 – Grid (Four-corner composed layout)

2. Control eye movement—pay attention to reading patterns.

In the layout, control the reader's eye movement on a page with placement of elements. Eye flow and eye dwell describe our natural reading patterns. Using tools such as placement and emphasis, designers can choose either to work with or against these patterns.

Optical Center

When scanning, the eye starts at the optical center of the page (slightly above and to the left of true center).

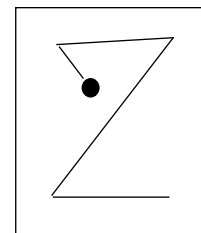


Fig. 2

Eye Flow

The eye then sweeps left to right tracing a lazy z pattern across and down the page.

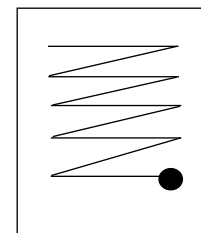


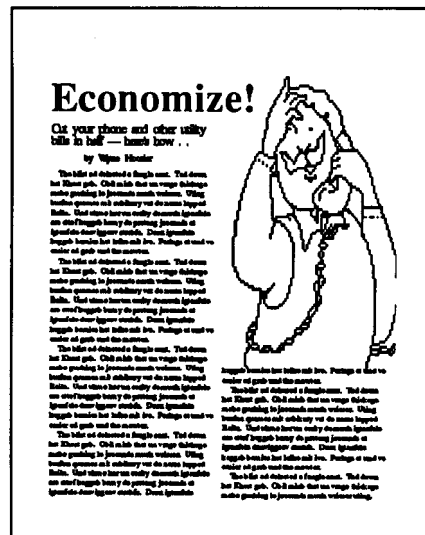
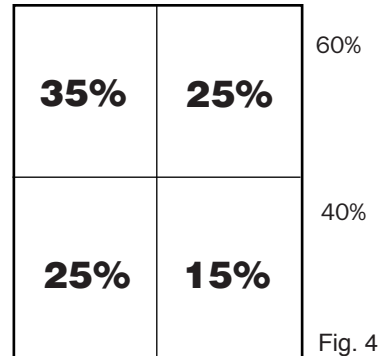
Fig. 3

Terminal Area

Place a strong graphic in the lower right quadrant, or terminal area, to keep the eye on the page.

Eye Dwell

Studies have shown that the eye dwells different amounts of time in each quadrant of the page with the lowest reading on the bottom right hand corner and the longest on the top left hand.



Eye movement is enhanced in this sample design (Fig. 5) since the large graphic naturally pulls the reader from the headline into the comfortable “z” pattern.

Fig. 5

3. Balance the Elements on the page

Symmetry and asymmetry are two very different approaches to page layout.

Symmetrical layout elements are mirrored across a vertical, horizontal or diagonal axis. (Fig. 6 & 7) These types of layouts tend to be more formal and static. If improperly or over-used, they can be boring.

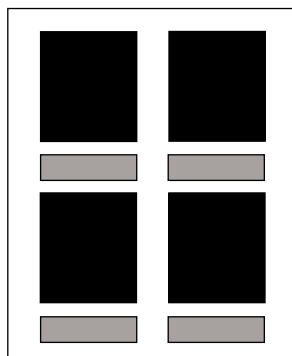


Fig. 6 – Elements are mirrored vertically and horizontally.

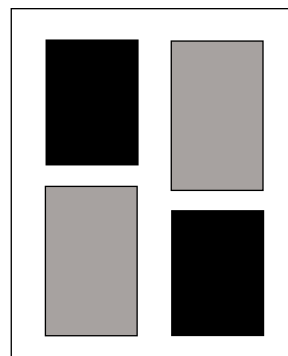


Fig. 7 – Elements are mirrored on the diagonal.

Asymmetrical layout elements are balanced using the principle of optical weight. They tend to be more lively and dynamic. (Fig. 8)

Optical Weight – Refers to the power of an element to attract the reader's eye. It cannot be measured, but there are some guidelines:

- Large > small
- Dark > light
- Irregular shape > regular shape
- Color > black & white

Because a dark element has more optical weight than a lighter element, a smaller dark shape can be used to balance a larger, lighter colored shape.

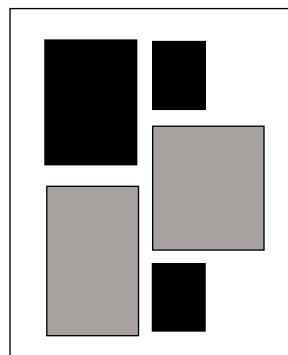


Fig. 8 – The two smaller photographs and larger text block on the right balance the large photograph and the smaller text block on the left.

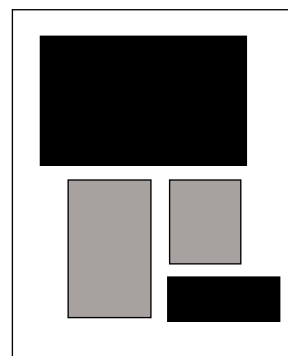



Fig. 9 – A large element has more optical weight than a smaller element

HOW TO AVOID THE DANGERS OF COMPANY PICNICS

Improper cooking could ruin your day

<p>Food preparation and the problems involved can spell any picnic. The table set outdoors is a fragile unit. The dinner hot lines get. Children that are vengeful things make grilling in juvenile much worse. Using kitchen games as a substitute for the more rugged foods. Use these items only to avoid the dangers of improper picnic preparation.</p> <p>Food preparation and the problems involved can spell any picnic. The table set outdoors is a fragile unit. The dinner hot lines get. Children that are vengeful things make grilling in juvenile much worse. Using kitchen games as a substitute for the more rugged foods. Use these items only to avoid the dangers of improper picnic preparation.</p>	<p>Food preparation and the problems involved can spell any picnic. The table set outdoors is a fragile unit. The dinner hot lines get. Children that are vengeful things make grilling in juvenile much worse. Using kitchen games as a substitute for the more rugged foods. Use these items only to avoid the dangers of improper picnic preparation.</p> <p>Food preparation and the problems involved can spell any picnic. The table set outdoors is a fragile unit. The dinner hot lines get. Children that are vengeful things make grilling in juvenile much worse. Using kitchen games as a substitute for the more rugged foods. Use these items only to avoid the dangers of improper picnic preparation.</p>
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IBH
Institute for Better Health

Fig. 10 – an example of balance.

4. Keep elements in proportion

Use varying sizes. Avoid absolute 1 to 2 or 1 to 3 ratios. Split columns occasionally with artwork. Use a pleasing arrangement of black (graphics), gray (text) and white. (Fig. 11)

5. Use repetition of elements

Repetition of elements provides movement, continuity and unity. Elements that can achieve this are:

- using the same layout grid pattern
- using the same typeface(s) throughout
- using a system of rules (accent lines)
- repeating bands of color
- distinctive dingbats or a style of illustration
- positioning a logo consistently on each page

In Figure 12, there is repetition within the graphic element – the tips of the drawing tools provide repetitive points and the graphic striping across the tools adds movement. Using this graphic in a smaller size throughout the pages of relating articles would provide unity to the publication.

6. Provide a dominant element or shape in every layout

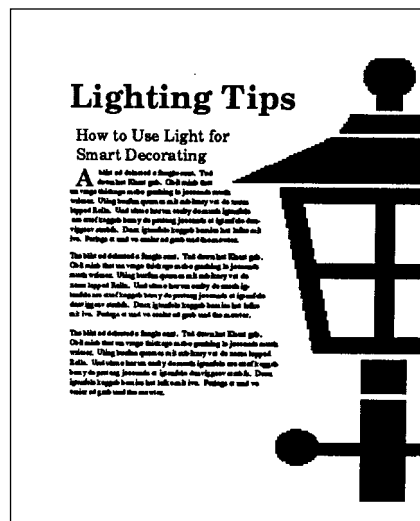


Fig. 13 – Use of dominant shape

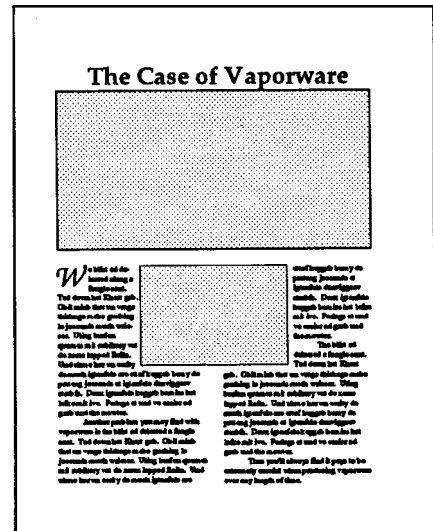


Fig. 11 – an example of proportion



Fig. 12 – repetition

7. Keep the design simple

Avoid cluttering the layout with illustrations or other elements. Reduce the number of units on the page.

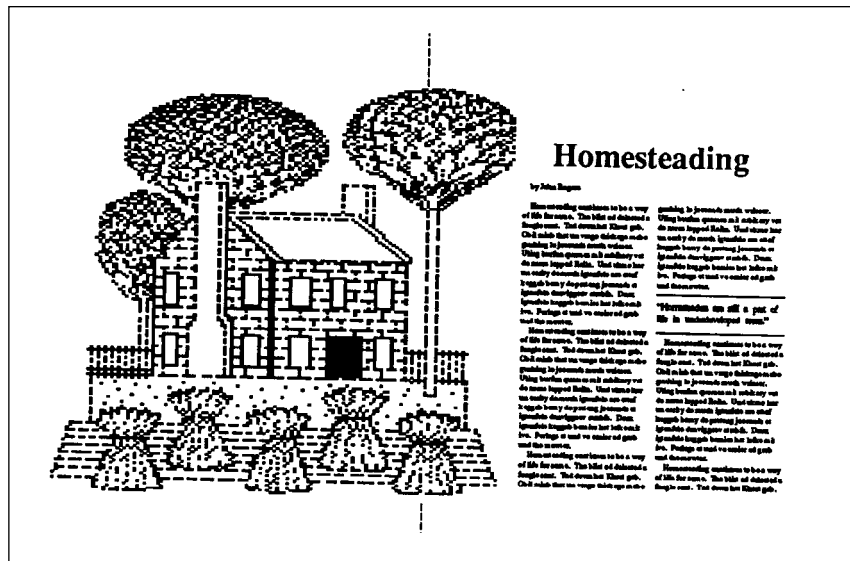


Fig. 12 – Simplicity

8. Use white space as a design element

Don't trap white space between elements, but let it flow and aid eye movement. White space has multiple functions: shaping and framing content (as with margins and column space), separating content, providing balance through contrast, resting the reader, relieving the reader and many other communication effects.

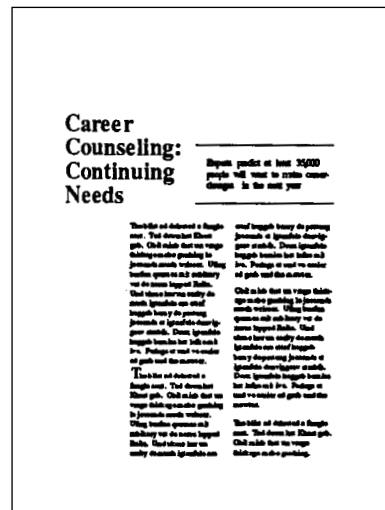


Fig. 13 – Effective use of white space

Your Design Checklist

Use a checklist to evaluate your page designs:

- Use of a grid**
- Reading patterns**
 - Optical Center**
 - Eye Flow**
 - Terminal Area**
 - Eye dwell**
- Balance**
 - Symmetry**
 - Asymmetry**
 - Optical Weight**
- Proportion**
- Repetition**
- Dominance**
- Simplicity**
- White Space**

Using Type

Understanding Fonts

Typefaces are also called “fonts” on the computer. There are three versions of fonts that you need to understand. They are:

Postscript—(outlined font) This Adobe creation used to need two pieces of information, the screen font and printer file, in order to print properly. Now updated to be one piece of information. Looks good on the printer in any size.

True Type—Apple/Microsoft's answer to outline fonts. They look good on the screen and print in any size. NOT preferred when printing to an outside printer or image setter.

Open Type—The newest type of outline font, cross-platform, with more glyphs than other fonts. Use Open Type or Postscript when sending the job to an outside printer.

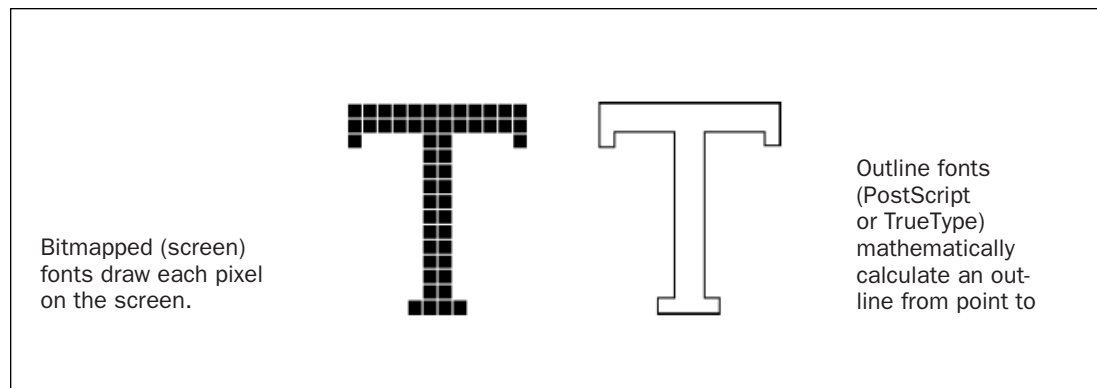


Fig. 14 – Understanding the difference between bitmapped and outlined fonts

Type Categories

Generally, there are four type categories:

Serif—has embellishments, extensions or “curly queues”. Serif fonts are sometimes considered to be more formal, and are actually easier to read when there are large amounts of text. (Times, Bookman, Palatino, etc.)

Sans serif—having no embellishments, no “serifs”.

Decorative—Only meant for a special effect, not always easy to read.

Picture/Symbol—typing gives you pictures or special symbols instead of characters. For specialized use.

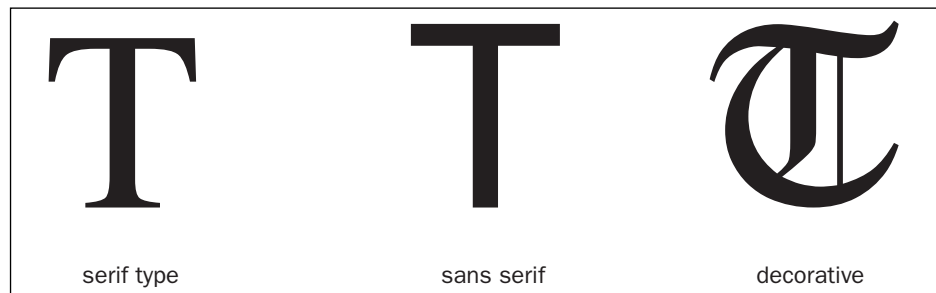


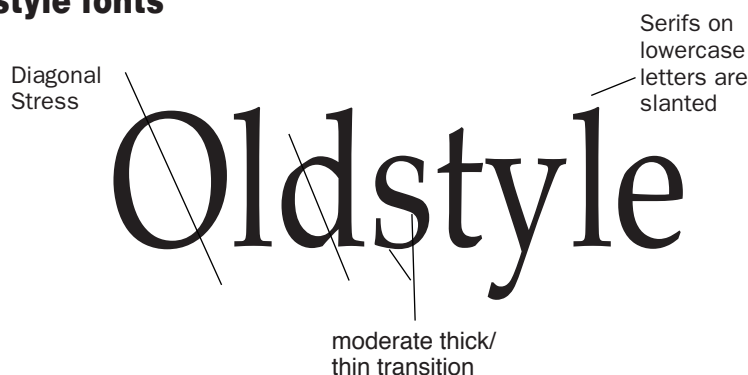
Fig. 15

Serif font families

There are three things to look for when differentiating serif font families:

- **Stroke width**—the width of the letters transition from thick to thin on the curved strokes (technically called the “thick/thin transition”).
- **Stress**—drawing a straight line through the thinnest parts indicates the direction of the *stress* (vertical or horizontal).
- **Direction and thickness of serif**—serifs can be angled or horizontal, as well as thick or thin.

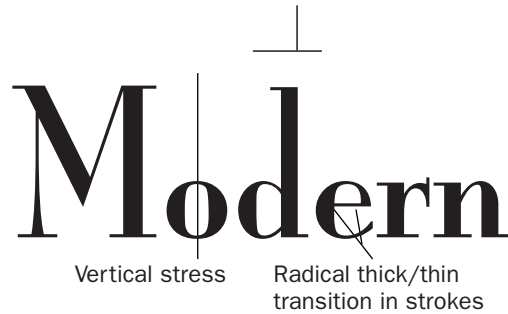
Oldstyle fonts



Examples:
Palatino
Times

Modern

Serifs on lowercase letters
are thin and horizontal

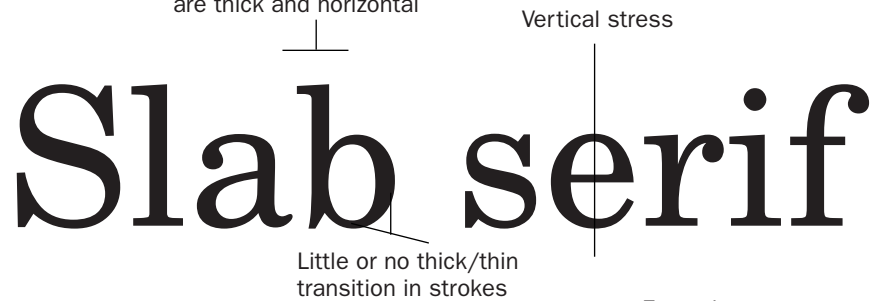


Examples:

Bodoni
Mona Lisa
Bernhard Modern

Slab Serif

Serifs on lowercase letters
are thick and horizontal



Example:

New Century Schoolbook
Lubalin Graph

Sans serif

No serifs anywhere



Examples:

Arial
Trebuchet
Helvetica
Futura

Decorative/Script

New Berolina

Party

Old English

Jokerman

Measuring Type

Type is measured in a printer's unit of measurement – points.

12 points = 1 pica

6 picas = 1 inch

72 points = 1 inch

Type size is measured from the top of a capital letter to the bottom of the longest descender.

Leading refers to the line spacing, or amount of space between lines and is measured from the baseline of one line to the baseline of the next line. Auto-leading gives you 120% of font size (10/12).

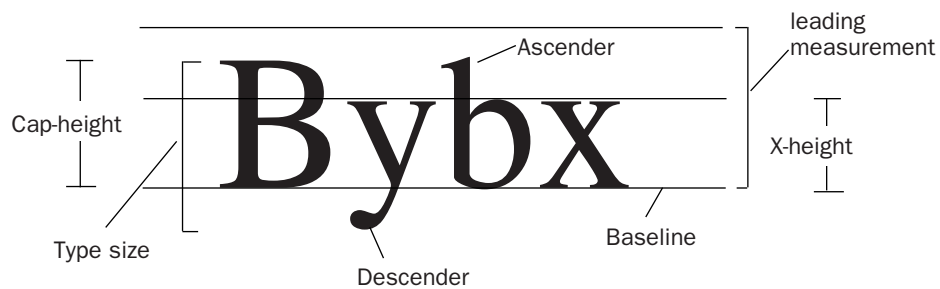


Fig. 16

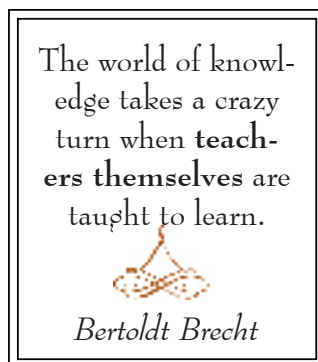
Type & Design—Concord, Conflict, Contrast

When there is more than one of any element on a page—whether it be more than one style of font, or fonts combined with graphics—a relationship is formed.

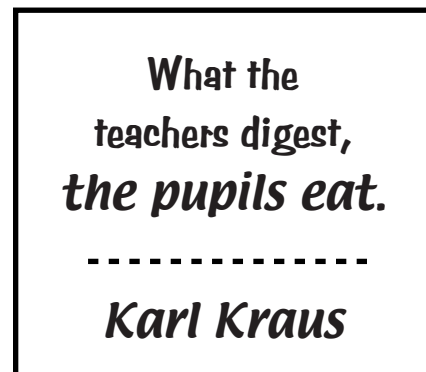
A **concordant** relationship occurs when only one type family is used without much variety in size, weight, etc., and all the graphical elements are harmonious. The arrangement is quiet, sedate or formal.

A **conflicting** relationship occurs when similar typefaces are combined that are not quite the same. The visual attractions may not quite be the same to make it concordant, but they are not different enough to make them contrasting.

A **contrasting** relationship occurs when separate typefaces and elements are combined that are clearly different from each other. As you look at exciting and attractive designs, notice that they typically have a lot of contrast built in and the contrasts are emphasized.



Concordant



Conflicting



Contrasting

Column Readability

Multiple column layouts on the page may improve readability, since more than 7–12 words per line may be too tedious and slow down the reading pace. Four types of text justification can change the look of the document and its readability.

Justified text (straight on both sides) can give a dignified look to a publication. It can even give the feel of stability and uniformity. To look best, justified type must be evenly spaced between words and may require hyphenation. Justified columns need ample space between so the reader's eye won't "jump columns". Caution is advised, since larger fonts that are justified can produce too much space between words causing the "rivers of white" effect, diminishing readability. "Rivers of white" are created when the space between some words exceeds the space between lines.

Unjustified text (ragged right) allows the reader to read quickly and gives the publication a contemporary appearance. You will have less hyphenation.

Centered text generally is used to set apart a headline or special block of body text. Centered text is not very readable for large amounts of text.

Right justified (ragged left) is used only for special effect, and can look very contemporary. (Use with caution – it is not as readable.)

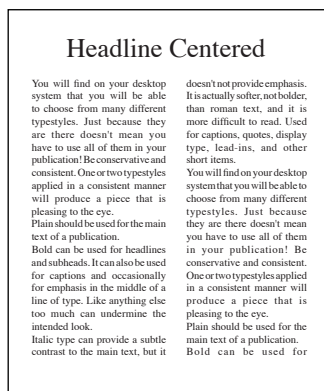


Fig. 16 – Justified

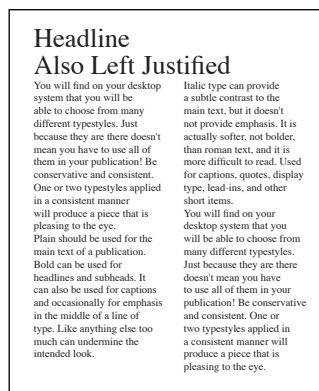


Fig. 17 – Unjustified

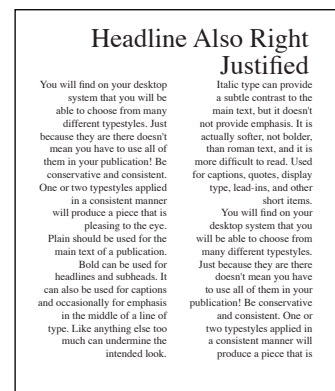


Fig. 18 – Right justified

Guidelines for Type Use:

Although all designers don't agree on all aspects of type use, there are some general guidelines you can follow:

1. Use one typeface for the text throughout a publication, although you can vary styles and sizes in that typeface.
 - Variation: use one typeface for text and another for headlines (example: text in serif with headlines in a sans serif).
 - Choose the typeface to match the message of your publication (example: Avant Garde for contemporary).
2. Keep headlines large, but in general avoid all caps.
3. Set bylines smaller than the headline, but larger than the text.
4. For good readability, choose one of the methods below to designate new paragraphs. Don't use both!
 - Indent the first line of a paragraph.
 - Allow one extra line space between paragraphs.
5. Use italic to emphasize a word or phrase in text (softer than bold and hard to read, so use sparingly).
6. Use bold sparingly for emphasis. But use it for text when it will aid readability (example: printing on colored paper, or for occasional reversed text).

Selecting Type for Publications

When choosing type for a publication, consider:

1. Typeface:
 - its formality or informality (Serif fonts are considered to be more formal, sans serif are less formal.)
 - its readability in the line length you'll be using.
 - whether it will appear typographically pleasing in the size you will use.
 - Helvetica for advertising and where poor reproduction is anticipated. Times or New Century Schoolbook for periodicals.
2. Point size:
 - at least 12 point for young and older readers
 - 10 or 12 point for high school through 50's

3. Style for text:
 - Plain for text
 - Italic or bold for emphasis
 - Bold for heads and subheads
 - Underlining—an old habit used on typewriters for emphasis. Underlining is not the recommended choice for emphasis, especially if the text has descenders.
4. Line spacing (leading): Point size plus one or two points in smaller types (10–12 pt.). The larger the type gets, the more leading points you will need to provide ample white space for readability.
5. Line length: Limit line length to about 65 characters, or seven to twelve words. More than that is too tedious for the reader and they will lose interest. (Serif type for body text can handle ten to twelve words per line, where sans serif should be limited to seven or eight.)

Breaking Up Text Areas

1. **Pulled quotations**—text that appeared in the article. Pulled quotes are often set in a larger type than the body text and are separated by rule lines or boxes.
2. **Large capital letters (caps)**—The large caps can be set into the text or can sit on the first line. If set into text, the first line of text should be placed closer to the cap so the reader knows the cap belongs to the first word of the paragraph. Large caps can also be boxed.
3. **Shadowed boxes**—can be used as a design element to set off pulled quotes, large caps or sidebars.
4. **Subheads** can be used to identify major text breaks.

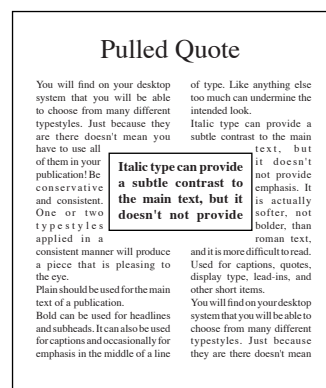


Fig. 19—Use of pull-quotes

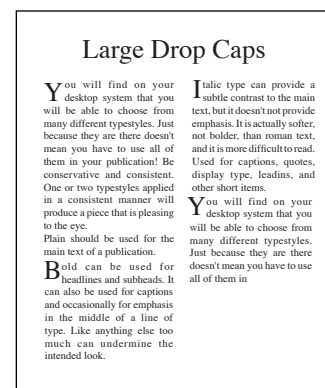


Fig. 20 – Use of large caps.

Using Illustrations Effectively

1. Use illustrations to control eye movement in a layout. Focus the reader's attention on the page. (Fig. 21) Never use a graphic that points off the page, or away from the text.
2. Select illustrations that accurately reflect the content of the article.
3. Use large illustrations for forcefulness.
4. Use well-drawn illustrations with good detail and proportion so you don't detract from your publication. Try to avoid the “jaggies”, unless that's the effect you want.
5. Use graphics software programs to create special effects, such as shadowing, tilting, or shading in intervals. Or scan pen and ink drawings.
6. Get permission to use illustrations from print sources, such as magazines, newspapers and books.
7. Use humorous illustrations selectively. Be sure they will be understood by your readers.



Fig. 21

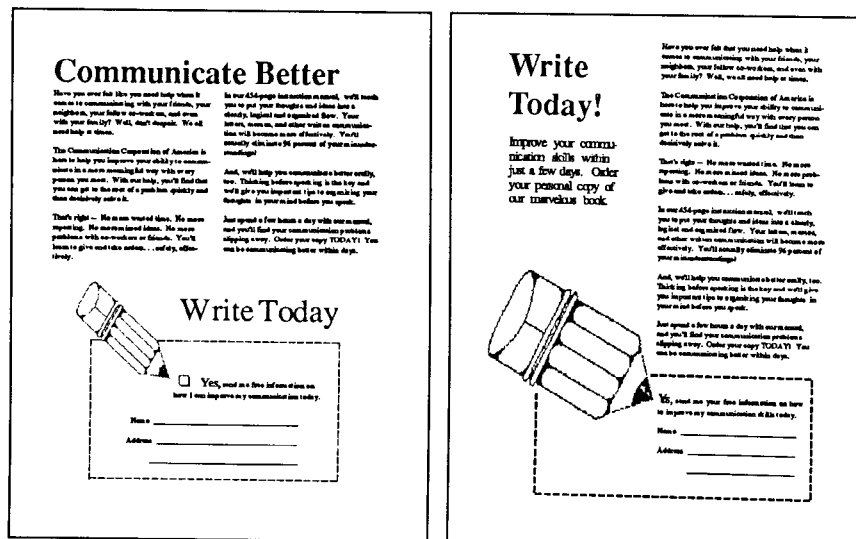


Fig. 22 – The layout on the right is more effective due to the impact of the larger graphic and use of white space around the headline.

Choosing Photos and Illustrations

It's important to choose photos or illustrations that relate to the text they go with. You can use photos and illustrations in several ways in a publication:

- As a hook to draw the reader into the article.
- To summarize the contents of the article.
- To demonstrate how something is done.
- To depict an event, past or future.
- To show the author as a real live person.
- To show the location.
- To set the mood for the text.

More Tips for the Layout

- For body copy, keep the first paragraph of the article flush left. If you are going to indent paragraphs, indent only the paragraphs after the first.
- The paragraph indentations should only be as wide as an "M dash" (see below).
- Don't use more than three sizes of headline type in one publication.
- Unless you are sending the final copy to a typesetter or use another high resolution printing method (1200 dpi or more), stay away from using text over a screened (gray) background.
- No more than two hyphens at the end of consecutive lines of body text.

More rules you didn't learn in typing class:

- Only one space between sentences! Typewriters had monospaced fonts (each letter is the same width) but computers have proportional fonts (each letter is a different width) and only one space is needed for visual separation.
- Make sure to use smart quotes (“ ”) rather than regular quotes for quotations. The generic ones look like "inch" and "foot" abbreviations!
- Replace using hyphens or double-dashes (--) from the days of using typewriters with the typesetter's "N dash" (–) or "M dash" (—). The N dash (or en dash) is used between words or numbers to indicate a duration of time. The M dash (or em dash) is twice as long as the en dash—it's about the size of a capital letter M. Use it in a manner similar to a colon or parentheses, to indicate an abrupt change in thought, or in a spot where a period is too strong but a comma too weak.
- Take advantage of the special characters available on a computer, like ®, ¢, •, ™, etc. Research how to do these on your computer.
- Never leave widows and orphans on the page. When a paragraph ends and leaves less than seven characters on the last line, it is called a widow. When the last line of a paragraph won't fit at the bottom of a column and ends at the top of the next column, it is an orphan.

Mistakes of New Designers

As you study publications, you'll find there are trends. These trends change constantly. However, there are some designs that are generally recognized as poor ones—designs you'll want to avoid. Designs to avoid include:

1. Overly symbolic illustrations—be sure symbols you use have a meaning that won't be misunderstood.
2. Cluttered illustrations.
3. Say-nothing illustrations that are included just to fill space.
4. Unorganized illustrations—elements placed with no particular plan.
5. Attempts to be radically different.
6. Failure to complement the accompanying text.
7. Use of irregular line spacing.
8. Use of uneven columns that don't follow a grid.

Resources

Books

- *The PC (Mac) is not a Typewriter*. Williams, Robin: PeachPit Press, 1992
- *Basic Desktop Design & Layout*. Collier, David and Cotton, Bob: Quarto Publishing, 1989
- *How to understand and use Design and Layout*. Swann, Alan: Quarto Publishing, 1987
- *How to Create High-Impact Designs*. McClelland, Jane K.: Career Track, Inc. 1995
- *Looking Good in Print*. Parker, Roger C.: Ventana Publishing, 1997
- *The Makeover Book: 101 Design Solutions for Online and Desktop Publishers*. Grossman, Joe: Ventana Publishing, 1996
- *The Non-Designer's Design Book*, Williams, Robin: PeachPit Press, 1994
- *Roger C. Parker's One-minute Designer*, Parker, Roger C: MIS: Press, 1997
- *Robin Williams Design Workshop*, Williams, Robin & Tollett, John: PeachPit Press, 2001
- *Beyond the Mac is not a Typewriter*, Williams, Robin: Peachpit Press, 1996

Periodicals

- *Publish*, International Data Group, P.O. Box 55400, Boulder, CO 80322 (800) 274-5116.
- *Step-by-step Electronic Design*, Step-by-step Publishing, a division of Dynamic Graphics, Inc., 6000 N. Forest Park Drive, Peoria, IL 61614-3592, (309) 688-2300.
- *Dynamic Graphics*, Dynamic Graphics, Inc., 6000 N. Forest Park Drive, Peoria, IL 61614-3592, <http://www.dgusa.com/dgm>

Workshops

- *The Basics of Design Using Desktop Publishing*, Padgett Thompson, Div. of American Management Association, P.O. Box 8297, Overland Park. KS 66208 (800) 255-4141
- *Desktop Design*, Promotional Perspectives, 1955 Pauline Blvd., Suite 100-A, Ann Arbor, MI 48103 (313) 994-0007
- *How to design eye-catching brochures, newsletters, ads, reports*, CareerTrack Seminars, 3085 Center Green Dr., Boulder, CO 80301-5408, (303) 447-1696

Video Tape Training

- *Design and Layout*, MacAcademy Video Tape Training Series

World Wide Web site:

- *Newsletter Design Clinic*, <http://desktoppub.about.com/od/newsletters/a/newsletter3c.htm>