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Designing for Easy Use

Your site visitors react to the look of your web site or mobile screen before they've read anything. If the initial appearance turns them off, you may never get to converse with them.

Design continues to be important throughout the conversation. Information design – layout, spacing, fonts, color combinations – can help or hinder your site visitors.

A study on how people's judgment of the visual appeal of sites within the first 50 milliseconds holds up on longer looks: Lindgaard, Fernandes, Dudek, and Brown, 2006

Ah! This page is going to be easy to use.

All these centered lines are really hard to read.

www.cpg.org

For successful conversations, you must develop design and content together. Waiting until the end and just pouring content into a design that was created without real content is a recipe for disaster.

Who should read this chapter – and why?

Content and design are deeply intertwined. That's why I think it is critical to have a chapter on design in a book about content – and why I think that every book about web design should have a chapter on writing web content.

- If you are a designer, read at least up to the section on color on [page 51](#). Involving content strategists and content writers early and continuously will greatly reduce last-minute frustration for all of you and greatly increase the probability of launching a successful product.
- If you are a content specialist, my goal is to give you an overview of some important points about information design so you can collaborate well with designers. This whole chapter is for you. I hope you are working with visual designers to be certain that decisions on color, space, fonts, and so on allow site visitors to easily see and read the content.
- If you wear both hats, this chapter gives you ways of talking about content and design that should help you when you're collaborating with people who don't have your skills.

My two first broad guidelines:

- Integrate content and design from the beginning.
- Build in flexibility for universal usability.

Then, I have just a few guidelines for you in each of three categories:

- Color
- Space
- Typography

(I realize that each of these three specific topics could – and does – fill entire books. For each, I have just a few points I want to be sure that you are thinking about as you – designers and content folk – work together.)

Integrate content and design from the beginning

I hope that all of you – content strategists, content writers, and designers – are working together with a list of all the content types the

site will have, as well as how, when, and where the different types of content will appear on your site or in your app.

I also hope that you are working closely with other team members – brand, business, documentation, marketing, and social media strategists, as well as information architects and user experience specialists.

Look back at the list of content types in Interlude 1 on content strategy. Note that content includes much more than text – illustrations of all types, video, audio, interactive elements, and so on.

Answer content and design questions together

Content specialists and designers must work together to answer large questions like these:

- What types of content will appear on each type of page (home page, pathway pages, catalog pages, information pages)?
- How will the content and the presentation of that content differ for large screens and for small screens (classic web, tablet, mobile)?
- How will what you do for web and app work well with what you do for social media?

And more detailed questions like these:

- For catalog pages: What specific pieces of information will each item in the catalog have? How much space (character count) will you allow for descriptions? Will you have videos? Interactive elements?
- For articles: How long will typical headlines and headings be in the content? How many levels of headings will typical articles need? Will information pages have same-page links? Where will you put them? Will you have a photo, a video, or other nontext elements with the text?

Design decisions that constrain what writers can do come up at every stage as design progresses. Content specialists must, therefore, be part of all those decisions.

Use real content throughout the process

The tradition in design has been to use dummy text that starts with the words *lorem ipsum dolor* as content during design. Using this text is called “greeking” even though the words are Latin and not Greek. (Greek would be in a different alphabet.)

More about the history and use of *lorem ipsum*: www.lipsum.com

The reason I’ve typically heard for using dummy text is that it lets people concentrate on design features without being distracted by the content. But why do that? The design has to support meaningful content, so we should evaluate design and content together.

At a recent talk in a room full of designers, I declared, “No more *lorem ipsum!*” The designers applauded loudly. Many designers want content early. But they tell me that clients often push them to design without content. They have trouble getting content early enough. So we need to educate clients, too, to understand the importance of content strategy and how critical real content is for successful design.

Build in flexibility for universal usability



As you design, keep all your site visitors in mind. Meeting everyone's needs is much easier if you plan for accessibility and flexibility from the beginning.

I've been making this point for a long time. See the proposal at the end of my paper on the needs of low-vision web users:
Theofanos and Redish, 2005.

Make adjusting text size obvious

Make it easy for people to adjust the type size by giving them controls on the web page (Figure 3-1).

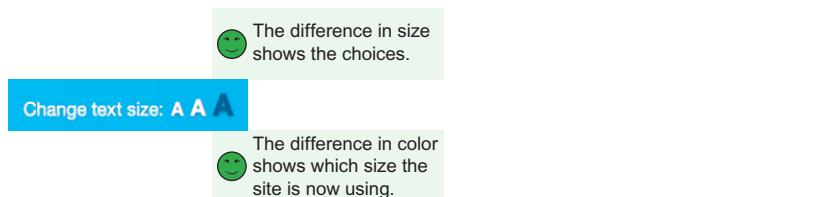


Figure 3-1 Every site should allow people to change text size – and give them an easy widget to do that.

www.cpg.org

Most people do not know that they can change the text size through browser menus. Even for those who do know, controls on each page make the option obvious. They send the message that the site cares about them. They increase trust.

Make all the text adjust

All the text on your web pages should get larger or smaller as people adjust the type size. On some sites, unfortunately, only the main content area adjusts with these changes. The side columns of navigation and other elements don't change.

All the content is important. Don't make people squint – or leave your site – because they can't read your menus or the sides of your pages.

Also, make sure that your pages are still usable at larger type sizes. For example, make sure that people can still get to the control of a dropdown box and that they can still use the fields in your online forms.

Allow other changes – contrast, keyboard, voice, and more

People's needs vary widely. Some people must use certain colors to see contrast between text and background. Others can only use the keyboard. Some need captioning for videos. Others need to hear everything.

Ford Mobility (Figure 3-2) and Ability.net (Figure 3-3) both provide lots of help to site visitors with special needs. You can, too.

The screenshot shows the 'Accessibility Help' section of the Ford Mobility Motoring website. At the top right, there are links for 'Go to:' (with a dropdown menu), 'Text Size A- A+', and a 'Print It' button. On the left, a sidebar contains links for the Ford Mobility Program, Build & Price, Resources, and Contact Information. The main content area features a large blue header 'Accessibility Help' with a yellow arrow icon. Below it is a 'Quick Links' list with five items: 'Introduction', 'Select color scheme', 'Select text size', 'Keyboard access information', and 'Multimedia Content'. To the right of the links is a photograph of two women interacting with a person in a wheelchair. Below the photo is a section titled 'Introduction' with text about cookie settings and a link to the 'PRIVACY' page. Further down are sections for 'Select Color Scheme' (with eight color options shown as buttons) and 'Select Text Size' (with 'Default' and 'A- A+' buttons). The bottom of the page includes a 'Keyboard Access Information' section and a 'Multimedia Content' section with a note about Adobe Flash and JavaScript.

Figure 3-2 Your site visitors may need these changes to use your site successfully.

<http://www.fordmobilitymotoring.com/accessibility.mob>


 A screenshot of the AbilityNet website. At the top left is the AbilityNet logo with the tagline "Adapting Technology • Changing Lives". To the right are two small profile pictures of smiling people. Below the header, the main title "My Computer My Way" is displayed in a large, bold, black font. Underneath the title, a paragraph of text reads: "Do you need help in making your computer easier to use? Let's look at the many ways you can make your keyboard and mouse, Windows, the internet and your favourite applications suit you and your needs...". Below this text is a list of links, each preceded by a blue arrow:

- [Why customising a computer is important](#)
- [Vision - help with seeing your screen](#)
- [Hearing - help with hearing sounds and audio](#)
- [Motor - help with keyboard and mouse difficulties](#)
- [Cognitive - help with reading, spelling and understanding](#)

Figure 3-3 This site helps people customize for their special needs.

<http://www.abilitynet.org.uk/myway>

Check the colors for color-blind site visitors

Never let color be the only indicator of a feature, function, or information.



About 5% to 8% of males have some form of color deficiency. Most often, they cannot distinguish red or green. Some women are color-blind, too, but the percentage is very small.

Consider what would happen on your site if someone cannot tell that the items on the page are in red or in green (or in other specific colors).

Figure 3-4 shows what a row of hats looks like to different people. If it is important that people see hats with five different colors, these colors won't work for people with deuteranopia, a form of red/green color-blindness.

The BBC also has an excellent page for both web users and web designers at www.bbc.co.uk/accessibility

Some colorful hats



As seen by a person with deuteranopia, a form of red/green color-blindness



Figure 3-4 What you see as bright and different colors may not appear that way to everyone else.
www.vischeck.com

Selecting colors that work for people with different variants of color-blindness is not simple. It isn't as easy as just avoiding all reds or all greens. The shade of red or green matters. And other colors can be problematic in combination with certain reds and greens.

Think about the cultural meaning of colors

Universal usability also means being sensitive to differences in language and culture both within your own country and across borders. Some graphics and colors are pretty much universal. You can drive almost anywhere and assume that a traffic light has red, amber, and green; that red means stop and green means go.

Colors also evoke connotations like aggressive, soothing, cheerful, luxurious – and those connotations differ across cultures. Colors are sometimes associated with political parties, which, of course, are country-specific. Rather than spout a few factoids about specific colors in specific cultures, the best advice I can give you is to test your site with people from the different cultures that you want to reach.

Color

In the early days of the web, we often saw an exuberance of design with wildly colorful – but not usable – web pages. Design exuberance can be wonderful – if it matches the personality of your site. But it also has to work with and not against the content. If you want people to read what you are putting on your site, you must make the text and illustrations legible.

The best way to know if your web page is going to work is to have people who are color-blind test it. You can use sites like www.vischeck.com and www.checkmycolors.com to get a preliminary view of how your web pages will look to people with different types of vision problems.

Be wary of factoids you read on web sites. Many are old or urban legends.

The rest of this chapter focuses on color, space, and typography for text. Although words are not the only part of your content, they are a vital part – and the part that I know best. Illustrations – Chapter 13. As I say in Chapter 13, you'll have to look beyond this book for best practices in creating great videos.

As you plan colors, consider these four guidelines:

1. Work with your brand colors.
2. Use light on dark sparingly.
3. Keep the background clear.
4. Keep the contrast high.

1. Work with your brand colors

If you are working with an established organization, the brand will almost certainly dictate the color palette to work with. Unless you have serious problems with it, work within that color scheme.

2. Use light on dark sparingly

Light text on a dark background is called “reverse type.” Most people find reverse text difficult to read for sustained periods, so don’t use it for your main content.

If you want to change the contrast from dark on light (the best) to light on dark, use reverse type only for small bits and make the type bold so it stands out. For example, many designers make reverse type work well on tabs, as Staples does in [Figure 3-5](#).

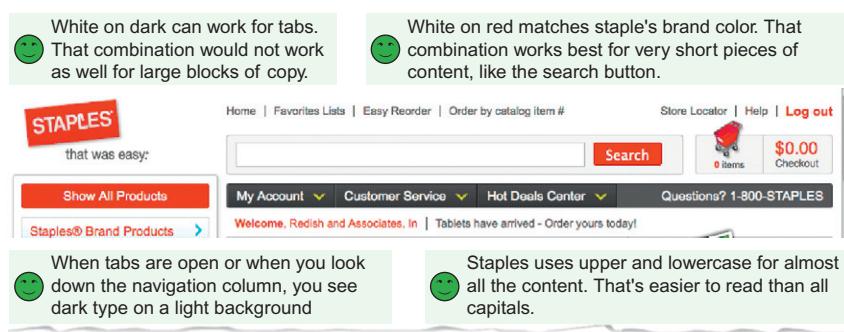


Figure 3-5 White type on a colored background can work well for small bits of text.

www.staples.com

3. Keep the background clear

Patterned backgrounds obscure the text, as in [Figure 3-6](#). Don’t do it. You defeat your goals if you make the page hard to see and the text hard to read.



Figure 3-6 When the foreground (the words) and the background compete for attention, it's hard to read the words.

www.huntmuseum.com

4. Keep the contrast high

Legibility requires high contrast between text and background. Many color combinations make text difficult to read because they don't provide enough contrast between text and background (Figure 3-7).



Figure 3-7 Some color combinations make text very hard to read.

Dark on dark (top row) or light on light (middle row) isn't as clear as dark on light or light on dark (bottom row). Blue text on red may even seem to vibrate on the screen, making that combination very difficult on the eyes.

Space

Space is not emptiness. It's an important design element. But blank space is a very precious commodity online.

Concern for space is a major reason to think mobile first! Working with the very limited space of the small screen can make designers and content writers conscious of how important it is to let go of the words. Trying to squeeze everything into the mobile screen just doesn't work, as you can see by comparing the screens in Figure 3-8.

More on tools to help you choose a color scheme:
<http://designshack.net/articles/inspiration/25-awesome-tools-for-choosing-a-website-color-scheme>

More on mobile: Wroblewski, *Mobile First*, 2011; Hinman, *The Mobile Frontier*, 2012

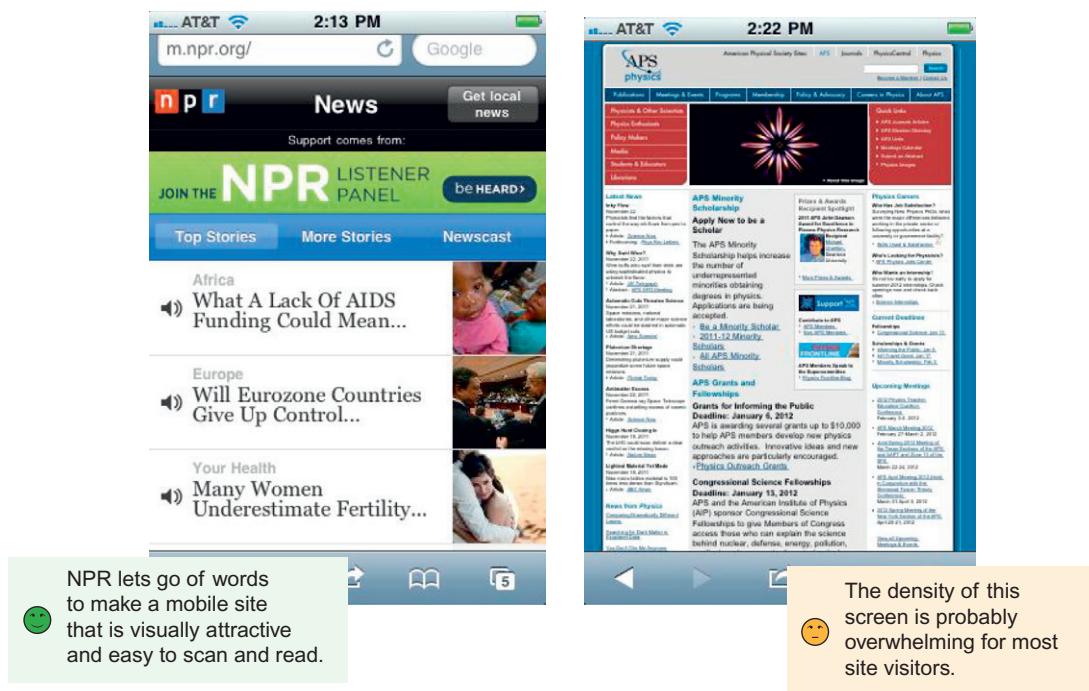


Figure 3-8 Space is a critical design element at all screen sizes.

www.npr.org (on an iPhone); www.aps.org (on an iPhone)

When you plan for space on your site, consider these six guidelines:

1. Create consistent patterns.
2. Align elements on a grid.
3. Keep active space in your content.
4. Beware of false bottoms.
5. Don't let headings float.
6. Don't center text.

1. Create consistent patterns

People love patterns. If the Search box is in the upper right on the home page, we expect to see it in that place on all the pages. If bulleted lists are slightly indented on the first few pages we look at, we expect all bulleted lists to be indented in the same way.

We are faster at understanding how the page is designed and at finding the specific part we need if the patterns are obvious and consistent across pages. Consistent patterns also help build site visitors' trust in the site, as well as confidence they'll have a successful experience.

We build our mental models of sites – our expectations for where different content elements are and what they look like – both from our experiences with other sites and with what we find on a particular site.

More on patterns: Tidwell, *Designing Interfaces*, 2nd edition, 2011

2. Align elements on a grid

One of the most effective ways to create patterns that people quickly see and learn is to have only a few places across the page where content elements start. When people complain that a site is “cluttered” or “too busy” or “hard to use,” they are often reacting to pages where elements are not lined up well.

Figure 3-9 shows how the New York Metropolitan Opera provides an easy-to-use site by setting up clear alignment and grids on each type of page.

The figure consists of three screenshots of the Metropolitan Opera website, each showing a different page layout but maintaining a consistent grid-based structure.

- Screenshot 1: Home Page (Top Left)**
Shows the main navigation bar at the top with links like "THIS WEEK", "SEASON & TICKETS", "LIVE IN HD", etc. Below is a large image of two performers and the text "The 2012–13 Season". To the left is a "SEASON CALENDAR" for March 2012, and to the right is a list of "Current Productions" with links to "Aida", "Un Ballo in Maschera", "The Barber of Seville—Holiday Presentation", "Carmen", and "La Clemenza di Tito". A sidebar on the left contains links for "Subscribe now!" and "View the 2012–13 Online Brochure".
- Screenshot 2: Production Page (Top Right)**
Shows a specific production page for "Aida" with details about the composer, librettist, and conductor. It includes a thumbnail image of a performer, a "Subscribe Now!" button, and a "Watch Director Videos" section with a play button icon.
- Screenshot 3: Support Page (Bottom Right)**
Shows a page for "Support the Met Broadcasts Campaign". It features a sidebar with links for "Make a Gift", "Broadcast Tradition", "Campaign Press Room", etc., and a main content area with sections for "Support the Met Broadcasts Campaign" and "Support the Met Broadcasts Campaign".

Figure 3-9 The Metropolitan Opera's templates are very clear, with well-defined grids.
www.metoperafamily.org

3. Keep active space in your content

Too little space on a web page or app screen can make information very difficult to skim, scan, find, and read. Too much space in the wrong places can mislead people about whether the web page is finished and about how headings fit with the text.

Information designers distinguish between passive space and active space (Figure 3-10).

- **Passive space** is outside of the main content area; for example, the margins on a piece of paper.
- **Active space** is inside the main content area; for example, the space between paragraphs and between list items.



Figure 3-10 Active space helps people use web pages.

www.redish.net

Online, we can usually reduce passive space, but we must keep active space to help people make sense of the information. Create useful active space by:

- breaking the text into small chunks
- using lots of headings
- keeping paragraphs short and putting space between them
- turning sentences into more visual forms, like lists and tables
- putting space into lists
- including pictures and other graphics with a little space around them

Compare the active space that you saw in [Figure 3-10](#) with the lack of active space in [Figure 3-11](#).

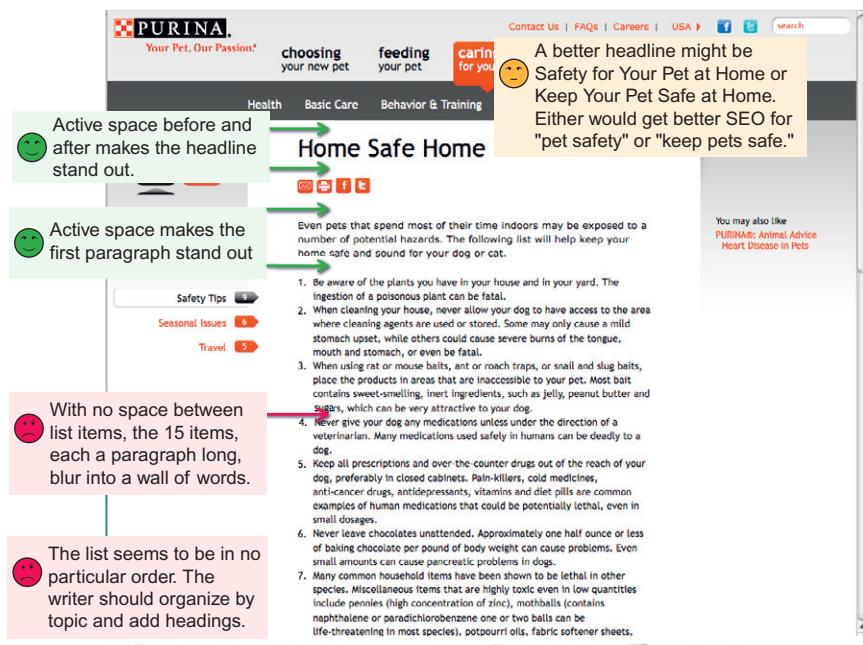


Figure 3-11 A long list with no space between list items is difficult to scan or read.

www.purina.com

On mobile screens, you have almost no room for passive space. But you must keep active space. For mobile web and app, let go of words. Keep only the content that you really need. Present that content in short pieces, lists, and visuals with a little space around each piece. Look back at [Figure 3-8](#) and see how small amounts of active space make the NPR mobile screen work so well.

4. Beware of false bottoms

You don't control how much any particular site visitor sees without scrolling. What they see depends on whether they are looking at your site on a mobile, tablet, laptop, or large monitor. Even on a large monitor, it depends on the resolution they are using and how large a window they have open.

Over and over in usability testing, I've seen people stopped by a horizontal line or a block of space at the bottom of their screen. Even if the scroll bar shows that there's lots more, the message that the

horizontal line or a large block of space seems to be sending overwhelms the message of the scroll bar.

Don't put a horizontal line or a large block of space across your web page. They stop people. Check your site on different devices, different size monitors, at different resolutions, and in different browsers to be sure that your spacing is not likely to mislead people.

5. Don't let headings float

When headings are the same distance from the text before them as they are from the text after them, our eyes don't know how to group the information on the web page. Compare Figures 3-12 and 3-13.

This heading doesn't lead to another page, yet it is in the same style and size as the other headings.

The headings are in the same color as the links, but they are not linked.

Sometimes, there's more space after the heading than before it. That makes it hard to visually group the information.

The headings are in all capitals. Every link has the same words - and that won't help someone who listens to the screen.

THE Y...FOR HEALTHY LIVING

Being healthy means more than simply being physically active; it's maintaining a balanced spirit, mind and body. At the Y you can learn a new skills and foster connections through our many activities.

FAMILY TIME...ENJOY BEING TOGETHER

Serving families has always been at the heart of the Y. [Learn more>](#)

HEALTH, WELL-BEING & FITNESS...A HEALTHIER AND HAPPIER YOU

Healthy lifestyles are achieved through nurturing the mind, body and spirit. In addition to our physical fitness facilities, we provide educational programs to promote healthier decisions, and a variety of programs that support physical, intellectual and spiritual strength. [Learn more>](#)

SPORTS & RECREATION...REACHING THE TOP WITH HELP FROM YOUR FRIENDS

We believe sports, fun and exploring new interests aren't just for the young. Along with improving health, there's the added benefit of being connected to others. You'll find a range of activities--there's no such thing as being too old to get in the game! [Learn more>](#)

Figure 3-12 Floating headings make it hard to see how the content pieces connect to each other.
<http://www.ymcahououston.org/healthy-living/>

When headings come right on top of the text, your site visitors won't have to think about how the headings and text go together. To make headings work well, put more active space above the heading than between the heading and the text it goes with.

Floating headings come naturally with ordinary HTML. To put the headings directly on top of the text they cover, use a cascading style sheet (CSS). You get much more with a CSS than just solving the problem of floating headings, but it's worth learning about and using a

Headings – Chapter 9

The space between the introduction to a list and the first list item is a similar problem. Use a CSS to remove that space, too.
[Lists – Chapter 11](#)

CSS even if this is the only problem that you have. Keeping the headings from floating is that important!

Size distinguishes the headline from sections that lead to links.

Only links are in the link color. (Headings could be in a different color.)

Space shows how each heading pairs with the text that follows.

We read mixed case faster than all capitals.

Informative links help everyone, not only those who listen to the screen.

The Y... for Healthy Living

Being healthy means more than simply being physically active. It's maintaining a balanced spirit, mind and body. At the Y, you can learn new skills and foster connections through our many activities.

Family time... Enjoy being together
Serving families has always been at the heart of the Y.
[Learn more: How the Y serves families >](#)

Health, well-being and fitness...
A healthier and happier you
Healthy lifestyles are achieved through nurturing the mind, body and spirit. In addition to our physical fitness facilities, we provide educational programs to promote healthier decisions and a variety of programs that support physical, intellectual and spiritual strength.
[Learn more: About all Y programs >](#)

Sports and recreation...
Reaching the top with help from your friends
We believe sports, fun and exploring new interests aren't just for the young. Along with improving health, there's the added benefit of being connected to others. You'll find a range of activities – there's no such thing as being too old to get in the game.
[Learn more: About Y sports for all ages >](#)

Figure 3-13 My suggested revision (with help from designer Jeff Rum of Spark Enterprise)

By the way: If you want to use rules (lines) with your headlines or headings, consider putting them **over**, not under. That way, the rule helps your site visitors group the headline with the rest of the page and each heading with the text that follows.

6. Don't center text



What is your reaction to the screen in Figure 3-14 (on page 60)?

Centered text violates our need for alignment. When the text is centered, our eyes have no “anchor” – no steady place to come back to at the start of each line. Centered text may be lovely on a wedding invitation, but it’s tiring for reading.

Even menu items in a left or right navigation column are easier to skim and scan when they are lined up on the left. Column headings in a table work better when each heading starts at the left column edge rather than being centered over the column.

Left-aligned, ragged-right (not justified on the right) is best for all web writing.

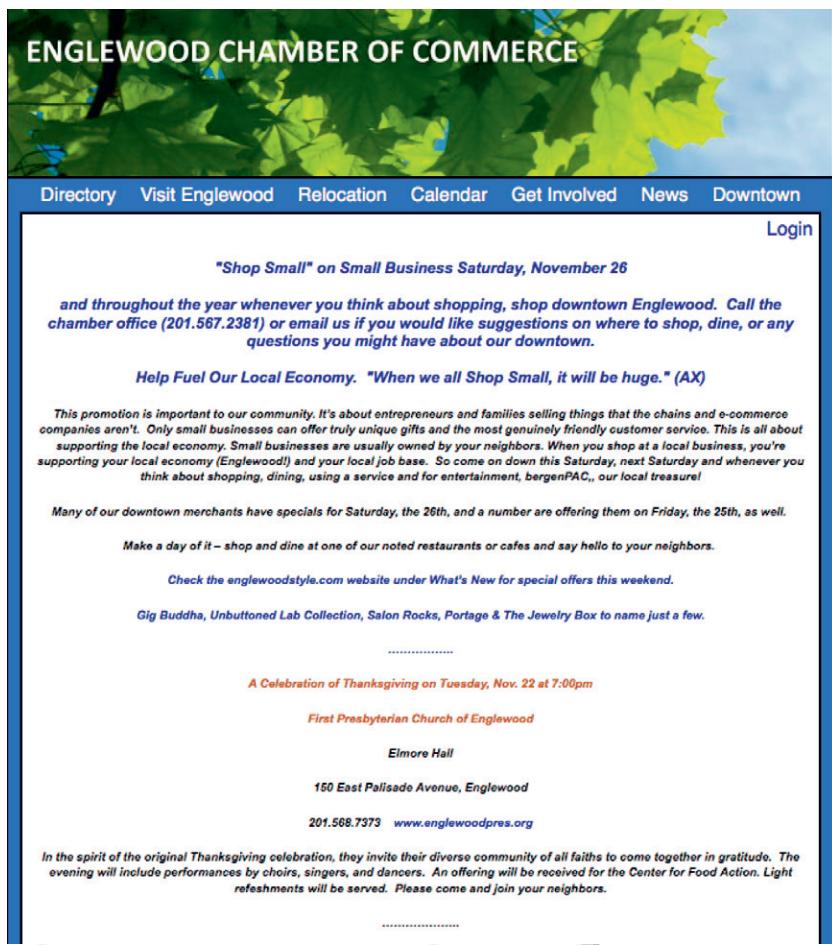


Figure 3-14 Centered text is hard to read.

www.englewood-chamber.com

Unless you are writing poetry, don't center text *anywhere* on your web pages.

More on space in web design:
Lupton, *Thinking with Type*,
2nd edition, 2010

Typography

If you want people to read, you must give them legible text. Your choices of color and your use of space contribute to legibility (or lack of it). So, of course, do your choices of type – the defaults you set for type face (font) and type sizes, as well as line length, highlighting, and how you use capitalization.

As designers and content specialists working together, consider these six guidelines:

1. Set a legible sans serif font as the default.
2. Make the default text size legible for your visitors.
3. Set a medium line length as the default.
4. Don't write in all capitals.
5. Underline only links.
6. Use italics sparingly.

1. Set a legible sans serif font as the default

Most web sites use sans serif type, such as Arial, Tahoma, or Verdana.

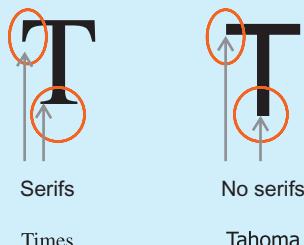
A brief primer on fonts and type families

Note: This discussion applies to type in the Roman alphabet that English and many other languages use. We would need a different discussion for other writing systems.

If you open the font list in your word processing program, you'll see a long list to choose from. That list could be even longer. Thousands of fonts are available.

But all the fonts in that huge list fall into two major categories: serif and sans serif (plus the unusual, artistic fonts that you would only consider for very special situations).

To see the difference, look at a capital T in Times and in Tahoma.



Serifs are the “arms” and “feet” that extend down and out on the letters of serif fonts. *Sans* is French for “without.” Sans serif fonts don't have the arms and feet.

Whether a font has serifs is not the whole story. Within each of those broad categories, fonts differ in other features such as how wide the rounded parts of letters like “b” and “d” are, how high lowercase letters like “x” are compared to the overall height of letters like “h,” how clearly the font distinguishes between the letter “l” and the number “1,” how close together the letters are to each other, and so on.

Even at the same point size, different fonts take up different amounts of space on the screen. Try it for yourself by typing the same sentence several times and then changing the font but not the point size for each rendition of the sentence.

Based on research in the mid-twentieth century, people often said that serif fonts were better for sustained reading. A common explanation was that the serifs at the bottom of the letters draw the eye horizontally along the line of type.

However, relying on that research for your web content may not serve your site visitors well for several reasons:

- The research is now more than 60 years old.
- Serif fonts were the norm then. People had little familiarity with sans serif.
- With just a point or two more space between lines of type (“leading” – a word from the days when printers put a slug of lead between rows of type), you can make even a paper document in sans serif very readable.
- On the web, we break information into small pieces with small paragraphs, short sentences, lists, and tables.

(An aside: Even on paper, you may want to use an appropriate sans serif. This book is in Trade Gothic, a sans serif font.)

Research on web content has not shown a consistent winner between serif and sans serif for either reading speed or comprehension. But preference almost always favors the familiar sans serif fonts. It may be familiarity; people see most sites in these sans serif fonts. It may be that a site in serif font looks like a paper document; it seems old-fashioned.

 Researchers who work with low-vision readers recommend familiar sans serif fonts for both paper and web.

Of course, you do not entirely control what your site visitors see. They may have their browser set to always show a particular font. However, as the default, select a highly legible sans serif font. Select one that most

of your site visitors are likely to have available on their computers. If you choose an unusual font, most people won't see your content in that font because browsers only use what the specific computer has available. Do usability testing to make sure your default results in legible pages.

2. Make the default text size legible for your visitors

Online, you are balancing how much to say and the space for saying it. If you only have a certain amount of screen "real estate" for your content, you either have to write fewer words or make the type smaller. That's a good reason to let go of words and focus on your key messages. If the type is too small, people won't read what you wrote. Write less. Use type large enough for your site visitors to read easily.



Consider all your personas. You may be much younger than many of your site visitors. You may have much better vision than they do. Most people develop vision problems as they age. Cater to them on your site.

3. Set a medium line length as the default

This is a paragraph of information written in Verdana with a line length of 100 characters per line. Although university students in one research study read lines that were this long faster than shorter lines, in another study, other students read the medium lines fastest. In both studies, the students preferred the medium line length. Do you find this comfortable to read?

This is a paragraph of information written in Verdana with a line length of 50 characters per line. This is the length that students preferred even when they read longer lines faster. Research on paper over many years found that people do best with lines of text about this long. Do you find this comfortable to read?

This is a paragraph of information written in Verdana with a line length of 25 characters per line. Whole paragraphs in very short lines are difficult for people because it's hard to get the meaning with so few words on a line. Do you find this comfortable to read?

The problem with very long lines of type is physical. Long lines are tiring to read. Our eyes have to move more to get to the end of the line. When moving back to the beginning for the next line, people sometimes skip a line or go back up a line.

The problem with very short lines is semantic – related to the meaning of the words. If the line is so short that people don't get a whole phrase, the copy can be hard to understand.

So set the default for classic web and tablet to be a medium line length (50 to 70 characters or about 8 to 10 words). Also, set your text to be fluid (liquid layout) so it adjusts and wraps well as people resize their windows or turn their mobiles from one orientation to another.

4. Don't write in all capitals

ALL CAPITALS TAKE UP 30 PERCENT MORE SPACE ON THE PAGE. THEY SLOW READING SPEED BY ABOUT 15 PERCENT. THEY ARE ALSO BORING. PEOPLE'S EYES GLAZE OVER, AND THEY TEND TO STOP READING. WHEN YOU WRITE WITH ALL CAPITALS IN EMAIL AND ON THE WEB, PEOPLE THINK YOU ARE SHOUTING AT THEM.

All capitals take up 30 percent more space on the page. They slow reading speed by about 15 percent. They are also boring. People's eyes glaze over, and they tend to stop reading. When you write with all capitals in email and on the web, people think you are shouting at them.



Which paragraph did you read? Do you agree that all capitals are more difficult and less interesting to read?

Using capital letters for headlines, headings, and emphasis is a carry-over from typewriter days when writers had very few options for varying the type in a document. We have better options today.

For web sites, follow these guidelines:

- Use ALL CAPITALS only for a single word or short phrase in specific circumstances where people expect it.
- Use **bold** or **color** for headlines and headings, not all capitals.
- Use uppercase and lowercase (like normal sentences) even for important information. If you put a whole paragraph in capital letters to make people pay attention to it, you will achieve exactly the opposite. Most people will ignore it.

FLASHLIGHT flashlight



Which did your eyes gravitate to? Which did you figure out fastest?

The traditional explanation for why all capitals are more difficult to read is that the shape of a word in lowercase give us more information than the shape of the same word in all capitals. The letters that stick up (have “ascenders”; b, d, f, for example) and the letters that go down (have “descenders”; g, p, y, for example) give words different shapes. Those differences in shape are present in lowercase letters but not in capital letters.

For an argument against the
“letter shape” explanation:
Larson, 2004

5. Underline only links

On web pages, people assume that anything that is underlined is a link, no matter what color it is. Underlining for emphasis or to indicate a book title is an old-fashioned technique from typewriter days.

6. Use italics sparingly

Italics have always been the way to show a book title in a printed document. Use that in your web content. Otherwise, use italics sparingly. They work as a light form of emphasis, but an entire paragraph in italics is hard to read.

Don’t use italics for headings. They don’t stand out on the page. And people don’t agree on how to put italics into a hierarchy of headings. When I show people sets of headings all at the same size where one is in **bold** type, one is in *italic* type, and one is in regular type, people always say the bold one is the highest level – the most important heading. But then I get mixed results for whether the heading in *italic* is more important or less important than the heading in regular type.

Use **bold** or **color** for all your headings. Change the size to show the levels.

Putting it all together: A case study

In the following case study, I take a web page through a series of changes so that you can see the effect of each design guideline.

Case Study 3-1**Revising a poorly designed web page**

Consider this page about the White-naped Crane as it originally appeared on a web site about birds:

White-naped Cranes *Grus vipio*

White-naped Cranes breed in northeastern Mongolia, northeastern China, and adjacent areas of southeastern Russia.

Breeding habitat includes shallow wetlands and wet meadows in broad river valleys, along lake edges, and in lowland steppes or mixed forest-steppe areas. White-naped Cranes nest, roost, and feed in shallow wetlands and along wetland edges, foraging in adjacent grasslands or farmlands. During migration and on their wintering grounds, they use rice paddies, mudflats, other wetlands and agricultural fields. White-naped Cranes are excellent diggers. The White-naped Crane is often found in the company of other crane species , including Red-crowned, Hooded, Demoiselle, and Eurasian Cranes.

Mated pairs of cranes, including White-naped Cranes, engage in unison calling, which is a complex and extended series of coordinated calls. The birds stand in a specific posture, usually with their heads thrown back and beaks skyward during the display. In White-naped Cranes, the female initiates the display and utters two calls for each male call. The male always lifts up his wings over his back during the unison call while the female keeps her wings folded at her sides. All cranes engage in dancing, which includes various behaviors such as bowing, jumping, running, stick or grass tossing, and wing flapping. Dancing can occur at any age and is commonly associated with courtship, however, it is generally believed to be a normal part of motor development for cranes and can serve to thwart aggression, relieve tension, and strengthen the pair bond.Nests are mounds of dried sedges and grasses in open wetlands. Females usually lay two eggs and incubation (by both sexes) lasts 28-32 days. The male takes the primary role in defending the nest against possible danger. Chicks fledge (first flight) at 70-75 days.



Do you agree that it is not as well designed as it could be?

You can probably identify several ways to make it easier for people to see it, read it, and get the information from it.

First, let's make it easier just to see by increasing the contrast between the background and the text.

White-naped Cranes *Grus vipio*

White-naped Cranes breed in northeastern Mongolia, northeastern China, and adjacent areas of southeastern Russia.

Breeding habitat includes shallow wetlands and wet meadows in broad river valleys, along lake edges, and in lowland steppes or mixed forest-steppe areas. White-naped Cranes nest, roost, and feed in shallow wetlands and along wetland edges, foraging in adjacent grasslands or farmlands. During migration and on their wintering grounds, they use rice paddies, mudflats, other wetlands and agricultural fields. White-naped Cranes are excellent diggers. The White-naped

Crane is often found in the company of other crane species , including Red-crowned, Hooded, Demoiselle, and Eurasian Cranes.

Mated pairs of cranes, including White-naped Cranes, engage in unison calling, which is a complex and extended series of coordinated calls. The birds stand in a specific posture, usually with their heads thrown back and beaks skyward during the display. In White-naped Cranes, the female initiates the display and utters two calls for each male call. The male always lifts up his wings over his back during the unison call while the female keeps her wings folded at her sides. All cranes engage in dancing, which includes various behaviors such as bowing, jumping, running, stick or grass tossing, and wing flapping. Dancing can occur at any age and is commonly associated with courtship, however, it is generally believed to be a normal part of motor development for cranes and can serve to thwart aggression, relieve tension, and strengthen the pair bond.Nests are mounds of dried sedges and grasses in open wetlands. Females usually lay two eggs and incubation (by both sexes) lasts 28-32 days. The male takes the primary role in defending the nest against possible danger. Chicks fledge (first flight) at 70-75 days.

White background, but still in serif font, centered

Now, let's change from centered text to left-aligned. And let's break up the text more.

White-naped Cranes *Grus vipio*

White-naped Cranes breed in northeastern Mongolia, northeastern China, and adjacent areas of southeastern Russia.

Breeding habitat includes shallow wetlands and wet meadows in broad river valleys, along lake edges, and in lowland steppes or mixed forest steppe areas. White-naped Cranes nest, roost, and feed in shallow wetlands and along wetland edges, foraging in adjacent grasslands or farmlands. During migration and on their wintering grounds, they use rice paddies, mudflats, other wetlands and agricultural fields. White-naped Cranes are excellent diggers.

The White-naped Crane is often found in the company of other crane species, including Red-crowned, Hooded, Demoiselle, and Eurasian Cranes.

Mated pairs of cranes, including White-naped Cranes, engage in unison calling, which is a complex and extended series of coordinated calls. The birds stand in a specific posture, usually with their heads thrown back and beaks skyward during the display.

In White-naped Cranes, the female initiates the display and utters two calls for each male call. The male always lifts up his wings over his back during the unison call while the female keeps her wings folded at her sides.

All cranes engage in dancing, which includes various behaviors such as bowing, jumping, running, stick or grass tossing, and wing flapping. Dancing can occur at any age and is commonly associated with courtship; however, it is generally believed to be a normal part of motor development for cranes and can serve to thwart aggression, relieve tension, and strengthen the pair bond.

Nests are mounds of dried sedges and grasses in open wetlands. Females usually lay two eggs and incubation (by both sexes) lasts 28-32 days. The male takes the primary role in defending the nest against possible danger. Chicks fledge (first flight) at 70-75 days.

White background, left-aligned, seven paragraphs instead of three, but still in serif font

Next, let's change the font – at the same point size.

White-naped Cranes *Grus vipio*

White-naped Cranes breed in northeastern Mongolia, northeastern China, and adjacent areas of southeastern Russia.

Breeding habitat includes shallow wetlands and wet meadows in broad river valleys, along lake edges, and in lowland steppes or mixed forest steppe areas. White-naped Cranes nest, roost, and feed in shallow wetlands and along wetland edges, foraging in adjacent grasslands or farmlands. During migration and on their wintering grounds, they use rice paddies, mudflats, other wetlands and agricultural fields. White-naped Cranes are excellent diggers.

The White-naped Crane is often found in the company of other crane species, including Red-crowned, Hooded, Demoiselle, and Eurasian Cranes.

Mated pairs of cranes, including White-naped Cranes, engage in unison calling, which is a complex and extended series of coordinated calls. The birds stand in a specific posture, usually with their heads thrown back and beaks skyward during the display.

In White-naped Cranes, the female initiates the display and utters two calls for each male call. The male always lifts up his wings over his back during the unison call while the female keeps her wings folded at her sides.

All cranes engage in dancing, which includes various behaviors such as bowing, jumping, running, stick or grass tossing, and wing flapping. Dancing can occur at any age and is commonly associated with courtship; however, it is generally believed to be a normal part of motor development for cranes and can serve to thwart aggression, relieve tension, and strengthen the pair bond.

Nests are mounds of dried sedges and grasses in open wetlands. Females usually lay two eggs and incubation (by both sexes) lasts 28-32 days. The male takes the primary role in defending the nest against possible danger. Chicks fledge (first flight) at 70-75 days.

White background, left-aligned, seven paragraphs, sans serif font

Finally, let's revise it by reorganizing, letting go of words, putting in bold headings, and adding a picture. The page may grow a little longer, but isn't it more inviting and easier to get the information?

White-naped Cranes – *Grus vipio*

Breeding area

Northeastern Mongolia
Northeastern China
Adjacent areas of southeastern Russia

Habitat

Shallow wetlands and along wetland edges, foraging in adjacent grasslands or farmlands

During migration and on their wintering grounds, white-naped cranes use rice paddies, mudflats, other wetlands and agricultural fields.

Breeding habitat includes shallow wetlands and wet meadows in broad river valleys, along lake edges, and in lowland steppes or mixed forest steppe areas.



White-naped Crane

Nests

Mounds of dried sedges and grasses in open wetlands

Eggs

Usually two

Nesting behavior

Both sexes incubate the eggs, which hatch in 28-32 days. The male takes the primary role in defending the nest against possible danger. Chicks fledge (first flight) at 70-75 days.

White-naped Cranes are often found with other crane species

The White-naped Crane is often found in the company of other crane species, including Red-crowned, Hooded, Demoiselle, and Eurasian Cranes.

White-naped Cranes dance, as do other cranes

All cranes engage in dancing, which includes various behaviors such as bowing, jumping, running, stick or grass tossing, and wing flapping. Dancing is commonly associated with courtship, but it can occur at any age. Dancing is generally believed to be a normal part of motor development for cranes and can serve to thwart aggression, relieve tension, and strengthen the pair bond.

Mated cranes call and display

Mated White-naped Cranes, like other crane pairs, engage in unison calling, which is a complex and extended series of coordinated calls. The birds stand in a specific posture, usually with their heads thrown back and beaks skyward during the display.

In white-naped cranes, the female initiates the display and utters two calls for each male call. The male always lifts up his wings over his back during the unison call while the female keeps her wings folded at her sides.

Summarizing Chapter 3

Key messages from Chapter 3:

- Integrate content and design from the beginning.
 - Answer content and design questions together.
 - Use real content throughout the process.
- Build in flexibility for universal usability.
 - Make adjusting text size obvious.
 - Make all the text adjust.
 - Allow other changes – contrast, keyboard, voice, and more.
 - Check the colors for color-blind site visitors.
 - Think about the cultural meaning of colors.

Color

- Work with your brand colors.
- Use light on dark sparingly.
- Keep the background clear.
- Keep the contrast high.

Space

- Create consistent patterns.
- Align elements on a grid.
- Keep active space in your content.
- Beware of false bottoms.
- Don't let headings float.
- Don't center text.

Typography

- Set a legible sans serif font as the default.
- Make the default text size legible for your visitors.
- Set a medium line length as the default.
- Don't write in all capitals.
- Underline only links.
- Use italics sparingly.