

The Path to Harmonious Web Usability and Design

1

The fundamental issues you need to address when you're designing your website are relatively universal (at least when it comes to interactive design): you need to create something that fulfills the needs of your audience. Even the most insignificant of interactive creations is usually intended for a wider audience than just the designer. As such, there are some extremely important issues you should consider during the creative process.

Chapter Contents

- Preparing Your Site
- Designing Effective Web Pages
- Getting from Here to There: Developing Intuitive Navigation

Preparing Your Site

When creating a website, you should spend as much time and effort in the predigital production process as you spend in the actual production process. The *predigital* process includes everything that must be done before you create a single line of HTML—from choosing your look and style to developing textual content. When you're creating a website of any complexity, there are a lot of things to keep track of. The best sites out there are an artful mix of technology, design, and usability that haven't been slapped together over a weekend. Instead, they've been created with a great deal of thoughtful predigital planning and preparation.

In the following sections, you are going to explore several topics that fit into the predigital production process: information design and architecture, developing a visual metaphor, and creating storyboards and concept art.



Note: Before diving into this chapter, it's important to remember that the information that will help you become a master of interactive design can hardly fit into one chapter. Heck, it can't even fit into a single book (or a stack of books for that matter). The whole point of this chapter is to provide you with tools, guidelines, and advice that will empower you to start thinking about the necessity of efficient and elegant interactive design. In addition, the chapter should act as the foundation upon which to further your own exploration of the topic. So, if you are already versed in the principles of interactive design and are looking right away for specific solutions in Dreamweaver, you may want to skip this chapter.

Creating Your Site's Information Design and Architecture

Information architecture is the organization of a website's content into easily accessible components that support a wide variety of user access techniques (casual browsing, direct searching, and so on). As one would expect, information architecture is intimately related to the navigational system of a site. You'd have a difficult time designing one without the other.



Note: This section of the chapter is designed to be a simple introduction to information architecture. Extra resources are a must. You might want to seek out Louis Rosenfeld and Peter Morville's *Information Architecture for the World Wide Web* (O'Reilly, 1998). If you are interested in extending your search to the Web, check out the Argus Center for Information Architecture at www.argus-acia.com.

At its most basic, the process by which you develop a site's information architecture is usually a two-step affair. The first step involves organizing your site's information into a variety of categories. You need to decide how many sections, subsections, and categories you need; how your site's content will fit into those categories; and how the units of information (individual web pages) will relate to units of information within the same category and to units in other categories. This is arguably one of the most difficult things about designing a site. The way we human beings organize information is largely determined by our cultural context. As a result, what constitutes well-organized information is subjective. One must contend with all manner of problems, such as linguistic ambiguity (a word or term may mean different things to different people) or different perspectives of how information should be organized.

As with many other issues in web design, the way you organize information will depend largely on your audience. You must put yourself in their shoes and predict the best way to develop an information architecture so that your users' needs are met. Developing a way to organize your content can often be a fairly painful process, but it is absolutely necessary in developing a functional and usable information architecture.

Once you've decided how to organize your information, the second step requires you to formalize the structure you created with something called an information architecture diagram (IA diagram). Designed to provide a visual representation of the information architecture of your site, an IA diagram can take many different forms (see Figure 1.1). Ultimately, the specific style is up to you.

An IA diagram isn't supposed to show the links between various pages within your site. Instead, it represents the hierarchical relationship between sections/subsections and individual pages.

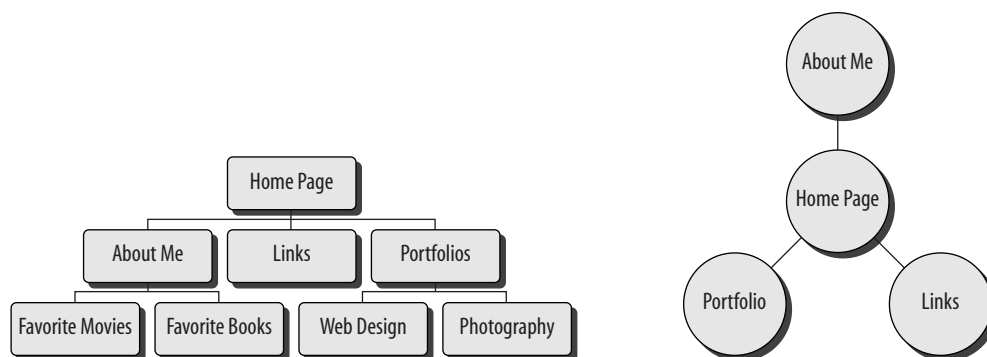


Figure 1.1 There are many different ways to create an information architecture diagram. The example on the left is a reverse branching tree model; the example on the right is the spherical model.

So, what is the big deal about creating an information architecture diagram? Well, there are a couple of things to consider. First, if you are working in a design group or making a proposal to a client or a boss, an IA diagram allows you to communicate the structure and information flow of the site to other people. Second, a well-designed IA diagram provides you with a blueprint of the site's structure that you can refer back to during the production process.



Note: An IA diagram is also very useful for developing the structure of your site on the server (folders, subfolders, and so on).

Developing a Visual Metaphor

A visual metaphor is often a pretty slippery concept to put into words, but it can be easy to unconsciously interpret when it's used properly. A visual metaphor, which is universally applied to an entire website, leverages familiar visual elements (such as images, interface elements, icons, colors, or fonts) to unconsciously reinforce the site's subject matter. The visual metaphor for a major Hollywood movie's promotional website will be completely different from that of an interactive design firm or an online merchant.

For example, in the screen shot depicted in Figure 1.2, the goal was to create a website for the Arizona State Institute of Human Origins for an online exhibit that would explore human evolution from our earliest ancestors to the emergence of *Homo sapiens*. Because of the archaeological theme, the website used an earthy palette of colors consisting of shades of brown, gray, rust, dark green, and tan combined with archaeologically oriented design elements to visually reinforce its content.

Creating an effective visual metaphor requires some serious brainstorming and inspired free association. You need to sit down and think about what kinds of colors, fonts, images, icons, and interface/layout elements unconsciously reinforce the site's content.



Note: Before you even begin brainstorming for your visual metaphor, be rock-solid sure of your audience. You can't effectively design a visual metaphor if you aren't exactly positive of the demographic profile of those who'll be using the site.

Say, for example, you are creating a children's online community site geared toward ages 7 to 10. You might think about using bold primary colors with cartoony interface elements and fonts. On the other hand, the website for a movie would draw its visual metaphor from the film's look and feel (check out the *Planet of the Apes* website at www.planetoftheapes.com for a great example).

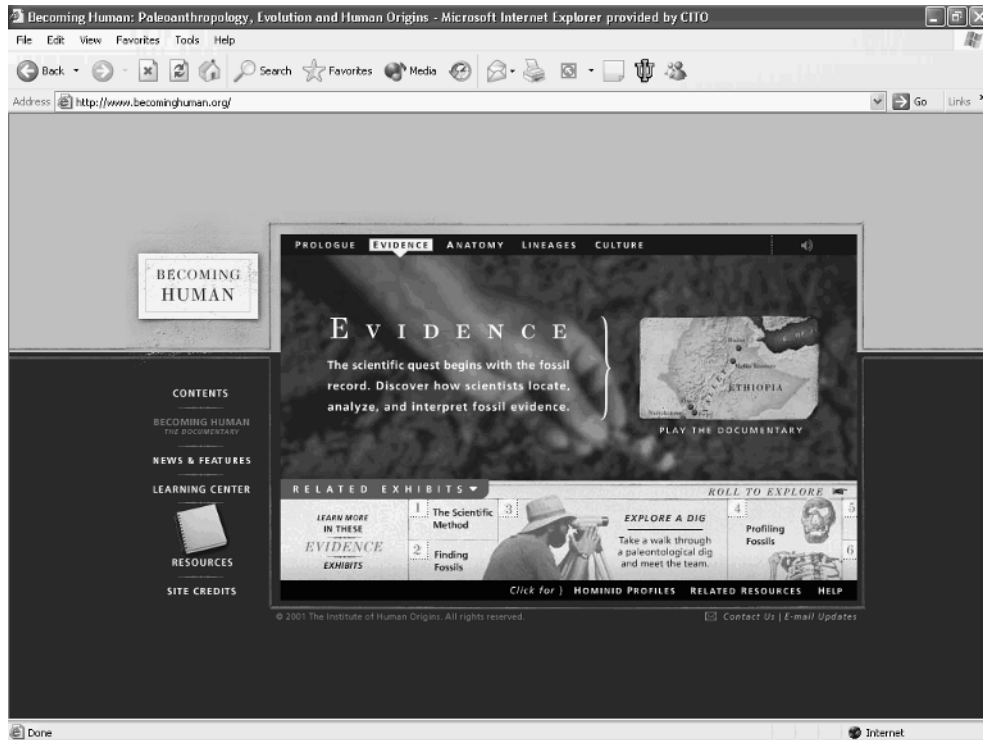


Figure 1.2 The Becoming Human website employs earth tone colors and archaeologically oriented imagery to create a solid visual metaphor.

There are no hard and fast rules for creating a visual metaphor. The only real guideline is that they should be used wisely: be subtle and don't overdo it. Always have your ideas vetted by individuals not associated with the project; they will often have suggestions or comments you never thought of. Don't get too attached to a visual metaphor because it's quite possible that, given an outside opinion (perhaps one of a prospective user), you'll decide that it doesn't work for your site.

Conceptualizing a Site's Layout and Design with Storyboards

One of the most important steps in the paper and brain predigital production process is creating storyboards or concept art, an idea swiped from the film industry. Generally one of the last steps before you go digital with your grand creation, storyboards are used to visualize your design as a complete entity. With them, you get a chance, among other things, to see how colors interact with one another, how interface elements play off one another, how your navigational system is realized, how your visual metaphor plays out, and whether content is represented in the best way possible. Storyboards provide you with a painless way of catching any potential design problems before you

get to the stage where you build your design in HTML and they become major obstacles. Storyboards are also a great way to play with design ideas and visually brainstorm.

As illustrated in Figure 1.3, there is no hard-and-fast rule as to how they should look. If you are brainstorming ideas, the back of a cocktail napkin is as good a medium as any. However, if you are preparing a pitch to a potential client, it's a good idea to come up with something more polished and formal. The bottom line is that storyboards, in whatever form they appear, should efficiently communicate your design ideas without too much ambiguity.

You may even want to create your storyboards in a photocopy of an empty browser window. This is a great way to give your client the necessary context. A browser template for the purpose of storyboarding has been included in the Chapter 1 folder of this book's companion CD.

Designing Effective Web Pages

The whole point of a website is that it's composed of a series of individual pages that are linked together. While designing the website as a whole is the ultimate goal of good web design, you need to give special attention to the pages within your website, and, more specifically, how those pages vary into your site as a whole. Today's browser technology allows users to view only one page at a time, so the pages within your site are the way the user interfaces with your site. The user doesn't really browse a site; they browse pages that make up a site.

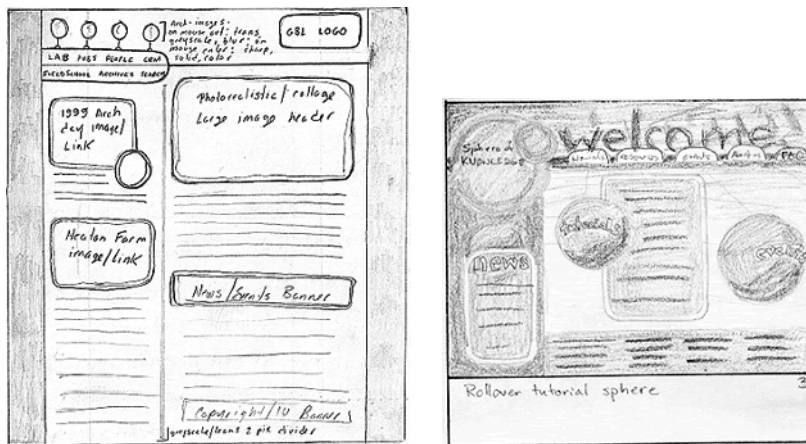


Figure 1.3 Storyboards can range from “quick and dirty” (left) to quite formal and polished (right). Whatever their level of quality, they should effectively communicate your design ideas.

The Web User and Experience-Based Expectation

An expectation (based on previous experience) is a subject that is hardly unique to response time. You are going to see the issue pop up again and again when it comes to user-centered web design. Why is experience-based expectation so important? Well, look at it this way: Every day you stop at many red lights and then go when they turn green. What would happen if, one day, you were sitting at a red light, happily waiting for it to turn green, and it turned blue? Would you be confused? Probably. Would you sit there, unsure of what you should do? Most likely. The abrupt change in the pattern (which was established based on experience) forces the formation of new behavior—which may take some time. The same applies in the world of user-centered web design. If the user has become accustomed to doing something one way (navigating, downloading, etc.) and you force them to learn how to do it another way, they may get annoyed, frustrated, or even angry and then go elsewhere.

Let's explore some of the key characteristics of creating a well-designed and usable web page—minimizing response times, writing for the Web, and creating usable links. It's very important to remember that what's covered in this section of the chapter is just the tip of the iceberg. You can use the information as a set of guidelines upon which to base your own design process.

Minimizing Response Times

One of the other fundamental issues for page design is response time, also known as download time, which is the amount of time it takes for a page to totally download after a user has clicked the link or typed in the URL.

Although you will need to balance visual design with response time, the guideline is “the faster the better.” Unfortunately, even with Internet connections getting faster and more and more people getting access to high-speed connections, we won't be getting sub-second response time anytime in the near future. Even with the fastest Internet connections, it still takes time to download a web page. As a result, the current goal for response time should range from 5 to 8 seconds. Anything more than that and the user will generally become bored and leave the site.

Note: When you start working with Dreamweaver MX 2004, you'll discover that the Document window's Document Size/Download Time indicator is a great way to get an idea as to the size (in kilobytes) of your page and how long it will take to download over a specified connection. However, for reasons that will be covered shortly, knowing the size of your page is hardly a guarantee as to the length of time it will take to download.



Beyond a fast response time, you also have to strive for low variability in your response time. The satisfaction of a user is partially based on their expectations as well as the actual response time performance.

When it comes to response time, if the same action sometimes happens fast and sometime slow, the user won't know what to expect and, therefore, won't be able to adjust their behavior to optimize their use of the system. If people assume that a page will download quickly, they'll be disappointed when it doesn't. In extreme cases, the variability in response time might prompt the user to think there is something wrong with the web page, their browser, or even their computer. Say, for example, a user visits a website and for the first five or six pages they visit, the response time is a respectable 6 seconds. However, when they visit the seventh page, it doesn't download in 6 or so seconds. In fact, after 25 seconds it hasn't downloaded. Now, it's entirely possible that the page itself is very large and it needs a long time to download. However, the user doesn't know this. They are forced to sit there, twiddling their thumbs, wondering whether their browser has had a nervous breakdown. They might even get so frustrated that they point their browser elsewhere. It's for all of these reasons, and more, that you should do your absolute best to keep response time variability to a minimum.

There is, however, a factor that contributes to response time that is completely out of your control. Response time (as well as the predictability in the response time itself) is determined by the weakest link in the chain from server to browser. So, the time it takes for a page to download is determined not only by the size of the page itself, but also by the throughput to the server, the server's connection to the Internet, the Internet itself, the user's connection to the Internet, and the rendering speed of the user's browser and computer.

So, given these issues, what can you do to minimize response time (and variability in response time)? Here are some suggestions:

- When you create your web pages, always try to keep their size as small as possible (given your design needs and the page's contents). It's important that you realize that there isn't an "ideal" file size that you need to hit. Instead, the size of your page should be based on your audience. For example, if the site you are creating is targeted toward an audience that you know will have fast Internet connections, you can employ media that uses more bandwidth. However, if your audience is accessing the Web with slower connections, you need to optimize your site so that it can be easily accessed.
- If you have a page whose contents make its file size much larger than many of the other pages within your site, use strategies to provide the user with feedback about the loading process. For instance, if you are working with Flash, you can use a preloader to indicate the amount of the file left to load. In HTML, when you are working with particularly large images, you can use Low Source images

(for more information on Low Source images, see Chapter 4 “Working with Images”).

- It’s always important to constantly test your web pages. By doing this, you can get an idea of any cross-browser or cross-platform compatibility issues, but you can also get a “realistic” idea of response time by uploading your site to a server and then testing it on different connections.

Writing for the Web

Even though the Web is getting more and more visual by the second, textual content is still easily one of the most important types of content. The thing you need to realize is that, because of the unique nature of the medium, writing for the Web is a type of writing unto itself. There are two important issues (both of which are linked to each other) that make the process of writing for the Web so unique.

First, when people read web pages, they don’t read them like they would read a book—from left to right, top to bottom. Instead, they scan the page in an irregular manner, looking for something of interest. Second, studies have shown that screen-based text is more difficult to read than printed text—which results in a reading rate that’s 25 percent slower than you would normally expect from printed media. Given these two facts, when you are writing for your website, you can’t just slap together text or copy and paste from a printed document. Instead, you need to put a lot of thought into how your text is structured and attempt to craft what you write so that it takes these two issues into consideration.

Understanding Bandwidth

Bandwidth is a measure of the amount of data that can be sent across an Internet connection over a certain unit of time (second, minute, and so on).

An Internet connection is the method by which you connect to the Internet itself and can range from a modem to a digital subscriber line (DSL). Each method has a different level of bandwidth, which can range from very low (downloads data from the Web slowly) to very high (downloads from the Web quickly).

Bandwidth is usually measured in terms of Kbps—kilobits per second. Most standard modems range from 14.4 to 56Kbps, while high-speed connections (such as cable modems, DSL, or T1 lines) range from 64 to 1500Kbps (and even higher).

You can think of your Internet connection as a pipe through which the material you’re downloading is shoved. A faster connection means a larger pipe, which means more stuff can be downloaded at a quicker rate. A slower connection, on the other hand, means a smaller pipe, which means things are downloaded at a far slower rate.

In the following sections, you are going to explore some strategies for creating text that supports scanning. In addition, you are going to look at some steps that you can take to increase the legibility of your text, thereby avoiding a situation in which you contribute to the difficulty of reading digital text.

Creating Scannable Text

Because people find it is so uncomfortable to read text on a screen (as well as the fact that the online experience can often foster impatience), users tend not to read long streams of online text. Instead, they scan text and pick out keywords, sentences, and paragraphs that interest them, while skipping over those parts of the text they care less about.

As a result, you need to craft your text so that it supports scanning. How do you do this? Well, here are some great guidelines:

- Structure articles with two, or even three, levels of headlines. As illustrated in Figure 1.4, using headlines allows people to quickly identify and focus in on areas of particular interest to them.

As a species, human beings are completely infatuated with themselves. Its nothing to be ashamed of, we're actually a really interesting bunch of primates. I'm certainly not embarrassed to admit that I've spent majority of my academic career scratching my head and trying to figure out why we act the way we do. It's no great surprise that this fixation has worked its way into the world of interactive entertainment. I'd suspect that most designers realize that computer games frequently mirror our thoughts about ourselves and the world around us. How did we get to where we are now? What is going to happen to us in the future? Both are questions that are posed time and again in processual story based strategy titles. Processual who? Story based what? Basically, its just a fancy shmancy name for God Games like Activision's *Civilization: Call to Power*, Sierra's *City Builder Series*, or Firaxis' *Alpha Centauri*. Each time the "new game" button is clicked, the player not only gets the opportunity to explore these questions, but also to play god (something all of us love but don't always admit to) and immerse themselves in a "what could have been" or "what could be" scenario.

Humans are Interesting

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Computers Games Mirror Us

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God Games

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Figure 1.4 The text on the top lacks headlines, while the text on the bottom has been broken up using headlines. The difference between the two can easily be seen.

Note: Nested headlines also facilitate access for visually impaired users with screen readers.



- Use meaningful, rather than “cute,” headlines. A heading should tell the user what the page or section is about; the reader should not be forced to read the actual text to find out what it is about.

Note: What exactly constitutes a cute or meaningless headline? One of my favorite examples is the kind of thing often seen in many newspapers. “Dog bites man, man bites back. See page A8 for more information.” What exactly does this mean? Not only does it not make sense, the reader is forced to turn to the inside page and read further to figure out if they are interested in the story. If a meaningful headline had been used (“Man bitten by dog, retaliates by spearheading new leash laws”), the reader could have immediately decided whether they wanted to read more.



- As illustrated in Figure 1.5, bulleted lists and similar design elements should be used to break the flow of uniform text blocks.

How did we get to where we are now? What is going to happen to us in the future?
Both are questions that are posed time and again in strategy games that attempt to emulate social evolution such as Activision's *Civilization: Call to Power*, Impressions Games' City Builder Series, or Firaxis' *Alpha Centauri* or *Civilization III*.
Each time the “new game” button is clicked, the player not only gets the opportunity to explore these questions, but also to play god (something all of us love but don't always admit to) and immerse themselves in a “what could have been” or “what could be” scenario.
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Figure 1.5 The text on the top has been broken up using bullets, while the text on the bottom hasn't. You can see that the bulleted text is far easier to scan than the un-bulleted text.

- Use highlighting and emphasis—such as color differences, bold text (as in Figure 1.6), or italicized text—to make important words catch the user’s eye.

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Figure 1.6 Text that has been emphasized (bold text was used in this example) tends to stand out and draws the reader’s eye toward it.

Creating Legible Text

Given the fact that people find it more difficult to read screen-based text than it is to read traditional printed text, you don’t want to add to their burden by creating text that is any harder to read. Remember, all else—spectacular design, low response time, compelling content—fails when the user can’t actually read the text. As a result, there are some general guidelines you should follow in order to craft legible text:

- Use colors with high contrast between text and background. As illustrated in Figure 1.7, optimal legibility requires black text on white background (called positive text) or white text on a black background (called negative text).

The worst color schemes are those that result in too little contrast (thereby making them almost impossible to read)—like pink text on a red background.

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Figure 1.7 Example of positive text (top) and negative text (bottom).

Note: Although the contrast ratio is almost as good for negative text, the inverted color scheme often throws people off a little and slows their reading slightly.



- Use either plain-color backgrounds or extremely subtle background patterns. As illustrated in Figure 1.8, complex background patterns interfere with the eye's ability to resolve the lines in the characters and recognize word shapes.

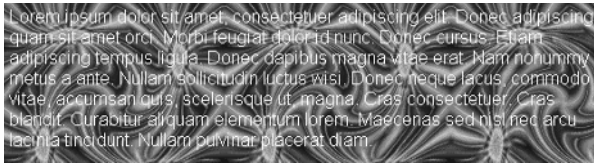


Figure 1.8 Text placed over a background with complex shapes or a “busy” pattern is very difficult to read.

- Use fonts that are big enough to make the text easy to read even if the viewer doesn't have perfect vision. Tiny font size should be relegated to footnotes or legal text.
- Make sure the text stands still. Moving, blinking, or zooming text is far harder to read than static text.
- Almost all text should be left justified. By having a steady starting point for the eye to start scanning, the user can read much faster than when faced with centered or right justified text.
- At all costs, avoid using all uppercase text. Users read uppercase text about 10% slower than lower and mixed-case text case text.

Getting from Here to There: Developing Intuitive Navigation

One could easily argue that designing an intuitive and usable system of navigation is one of—if not *the*—most important goals when it comes to creating a usable and well-designed website. User experience on the Web is all about moving in space from one location to another in search of *something*. Whether or not the user knows what they are looking for is moot. It's up to you to crawl inside the heads of the users, figure out what they want from your site, and then figure out the easiest way for them to get it. If

you don't provide a system for them to get from where they are to where they need to be, they'll go elsewhere, and this is the last thing you want.

Don't be fooled into thinking that a navigation scheme is simply buttons and hyperlinks. The best-designed navigation is a highly artful mix of many different things: a pinch of interface design, a dash of information architecture, and a generous dollop of psychology.

As I've mentioned, there is no way that I could effectively condense all that you need to know about designing intuitive navigation into one section of one chapter of one book. However, there are certain general, basic concepts that are both fundamentally important and self-contained enough that they can be discussed.

Keeping Navigation Consistent

We've already talked about the fact that one of the ways human beings define the world around them, and the way they interact with it, is based on the consistency and predictability of events. When a navigational system works properly, people come to unconsciously rely upon it. For this to happen, the navigational system must be consistent. This means (as shown in Figure 1.9) that on all the site's pages, the menu must remain in the same location, it must retain the same appearance and contents, and the interface where the navigational elements reside must not change to any significant degree.

One of the obstacles to designing a consistent and predictable navigation system revolves around the interplay between navigational elements and interface design at deep levels within the website. Often, as one gets deeper and deeper into a site, a certain point is reached at which the navigation scheme breaks down due to a lack of foresight. Designers tend to put most of their effort into developing a navigation scheme that will work best in the more consistently accessed areas of a site. As they move deeper and deeper into their site and the amount of information in any given screen increases, they spend less and less time ensuring that the navigation scheme they developed will function properly.



Note: The best-designed websites have a pyramid-shaped information distribution. The top levels of the site contain information that doesn't take up a great amount of screen real estate. As you move deeper into the site and into more specialized information, a larger amount of screen real estate is consumed by the website's content.



Figure 1.9 These two screen shots are of two different pages within the same site. Note that the navigational elements remain exactly the same.

It's at this point that chaos often sets in and the all important consistency and predictability goes out the window. To cope with the additional information, designers will toss in additional navigational elements (menus, buttons, and so on) or even alter the existing navigational scheme that worked just fine in the upper levels of the site.

Instead of succumbing to bedlam and anarchy, make sure that when you create the navigational scheme, you think deep into your site's structure. It may seem time consuming, but it could save you valuable time later. Because your user will probably spend more time in the deeper sections of your site, ask yourself whether what you've laboriously designed will work just as well with the content in the upper sections of your site as it will work with the content in the deeper sections of your site. If you can't answer with a resounding "yes," start again.



Note: Remember, the Web is a nonlinear medium. Users don't always enter your site through the front door: they can just as easily enter through a side or back door into a section deep within your site's hierarchy. Because of this, you should make sure that your entire site maintains a consistent scheme of navigation.

Help Users Quickly Learn Your Navigation Scheme

When you create a website of any kind, you are providing something to your user. Whether it's a mega online bookstore like Amazon.com, the site of a major educational institution like the University of Toronto, or your own personal corner of cyberspace, content is king. You don't want users to have to spend a huge amount of time learning how to locate what they desire. In other words, you don't want an overly complex navigational system to stand in the way of the user and what they want.

The key to easily learned navigational systems lies in several different issues. First, as I just mentioned, your navigational system should be consistent. If you switch the way you require your user to move about the site, they'll have to start from scratch and relearn your navigational scheme—not good. Second, as will be covered shortly, make sure your navigational elements (labels, visual imagery, and so on) are straight to the point and not overly complex or confusing. There is nothing worse than a series of buttons with labels that make no sense. Don't create navigational schemes that are counterintuitive and thereby difficult to learn.

Providing Clear and Obvious Visual Cues

Because the Web is a visual medium, effective navigational schemes should provide clear visual messages. I'm not just talking about the buttons here. Integrating clear visual cues into a navigational scheme requires some very broad (and often subtle) thinking.

Color

One of the best ways to provide your users with a quick and easy (and often unconscious) method of identifying exactly where they are located in your site is to use color. You may have noticed that many large sites use a consistent navigational system whose color changes slightly depending on the section or subsection where the user currently resides. This is a very effective technique that, when used properly, creates “signposts” for the user that are easily learned and recognized. When using color to increase the usability of your navigational system, you've definitely got some options. Changing the background color of individual pages is one way, but you can also use color for subtle emphasis—highlighting certain navigational or interface elements like buttons, banners, or header graphics.

There are, however, a couple of caveats to using color in this way:

- To avoid overwhelming the user with a new color for each subsection, pick a very limited palette and apply those colors to the top-level sections of your site. For example, say you're designing your own personal website and you use a nice light rust color for the “About Me” section. To avoid overwhelming the user, you'd also use that color for the “My Favorite Movies,” “My Family,” and “My Favorite Music” sections, all of which are subsections of the “About Me” page.
- Choose your colors carefully so that they fit in nicely with your visual metaphor.

Branding

Consistent and clear branding is also a good way to provide your audience with visual cues. Given the nature of the Web, people have a tendency to quickly jump from site to site with mouse clicks. When your audience is cavorting about your site, you want them to know *exactly* where they are. This is best accomplished with clearly and consistently placed logos, as shown in Figure 1.10.

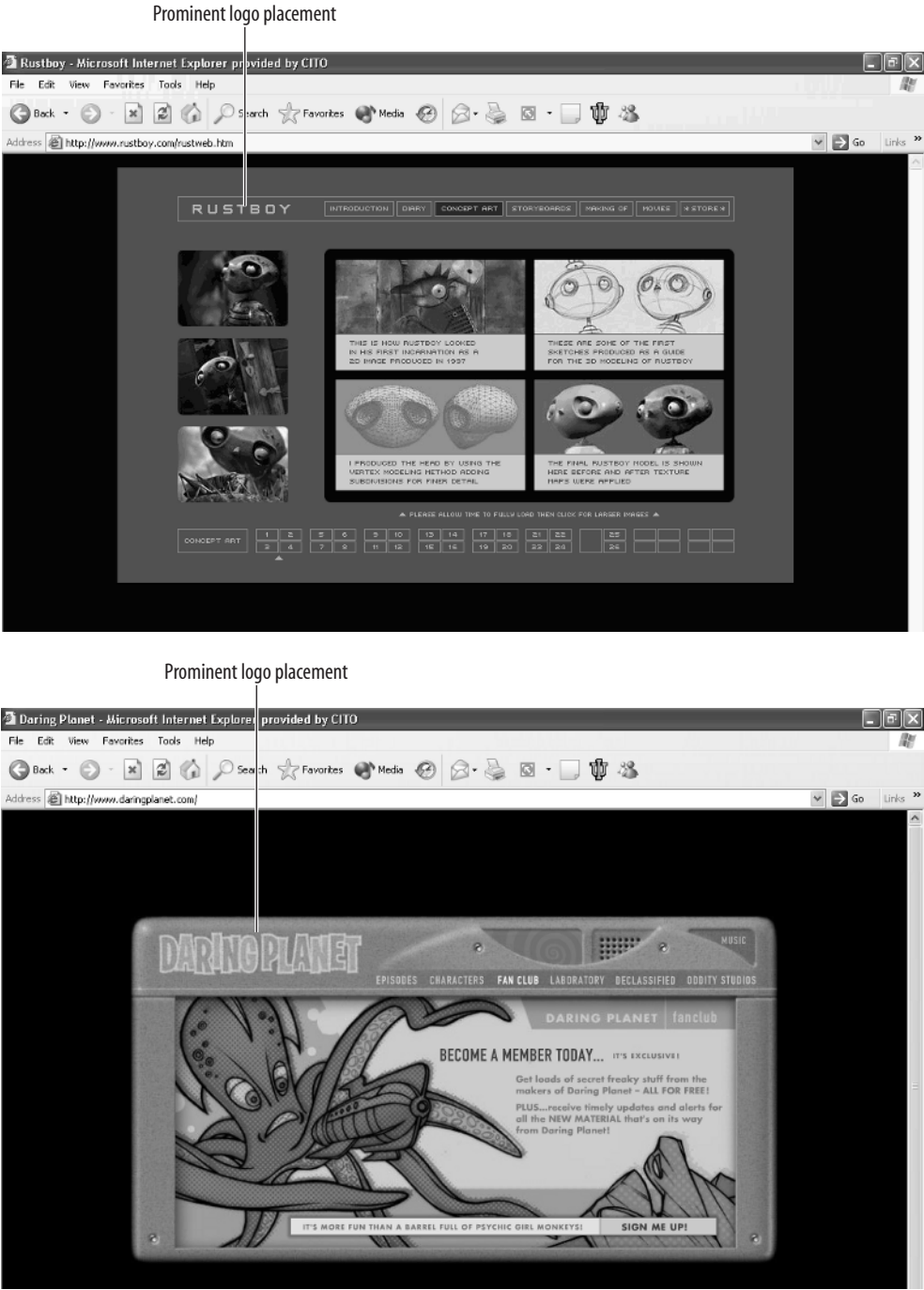


Figure 1.10 Notice that in both websites, a logo is prominently displayed to remind the audience exactly where they are.

Breadcrumb Trail

One of the biggest problems in particularly large, content-heavy websites is that people can easily get lost and end up with no clue of where they are located and no idea how to get back to where they were several clicks ago. One of the easiest and most elegant ways (and most cost effective in terms of effort and screen real estate consumed) to work around this problem is to create a simple navigational tool called a breadcrumb trail (Figure 1.11). A breadcrumb trail (sometimes referred to as a link buildout) is a horizontal line of hyperlinked words indicating the location of the current page within the site's overall information architecture. An example of a breadcrumb trail would be something like Home > About Me > Favorite Movies. Each item in the trail would be a hyperlink to that specific section or subsection.

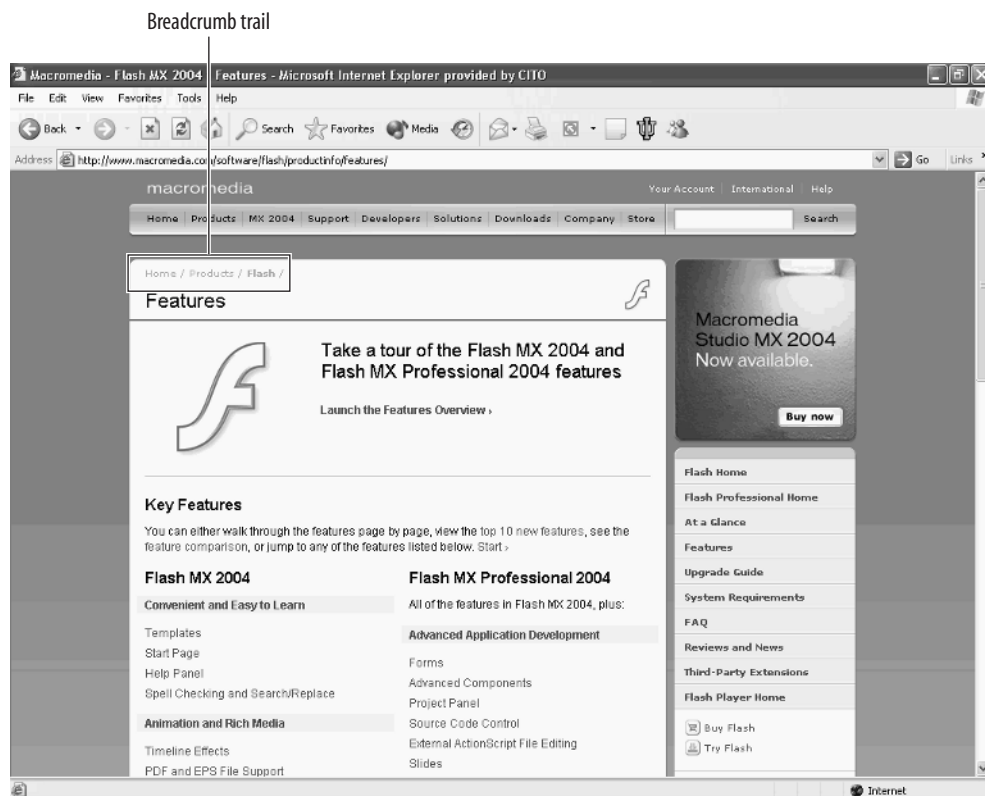


Figure 1.11 A breadcrumb trail provides a clear indication of the position of the current page within the site's overall structure; it also provides an easy way of moving back up that particular section or subsection's hierarchy.

Labels

One of the most often overlooked methods to provide clear and concise visual cues to your audience is to use effective labels. We're not just talking about ordinary labels here; we're talking about concepts that have been boiled down to their basic understandable components. For example, suppose a section of your site had images of all the photographs you've taken, all the paintings you've painted, and all the sculpture you've sculpted. Instead of having a link or a button that said "Everything I've ever created on film, with canvas, or with clay," you could simply use the word "Portfolio" or "Gallery."



Note: It's important to remember that many of the conventional web labels used are culturally based. While your average web user in North America wouldn't have any difficulty understanding your intentions if you used the word *Home* in your navigational scheme, someone from Egypt, the Czech Republic, or Malaysia may have absolutely no clue as to what you are referring.

When creating clear labels, you must avoid using what I call *geekspeak*, or terminology familiar only to those individuals within a specific field. For example, as an archaeologist, I've created websites where the term *Gray Literature* is used. If you have no experience in the field of archaeology, you probably don't have a clue what gray literature is. However, there are individuals out there who, despite the fact that they aren't familiar with the strange terms we archaeologists use, would be interested in gray literature. (*Gray literature* refers to the excavation reports generated by federally mandated salvage archaeological excavations.) To avoid *geekspeak* in this particular situation, I substituted *Gray Literature* with the term *Excavation Reports*, which is a lot more understandable to the general public.

Visual Vocabulary: Navigational Elements

Another good way to provide users with clear visual cues is by using consistent and universally understandable visual vocabulary. There are three general schools of thought when it comes to creating navigational elements (buttons, menus, and so on). The first one tends to emphasize the use of icons or imagery, while the second one emphasizes the use of purely textual-based navigation. The third, which I think is the most rational, encourages the appropriate and contextually suitable use of both text and images as navigational elements.

If you've decided to use a purely visually based navigation system, you are in for some serious obstacles. Using icons or images in navigation is fine, but you must realize that the Web itself has no real standardized conventions for visual vocabulary. So, for

instance, if you’ve created a button on your main page that links to your “About Me” section, what icon do you use? The possibilities are literally endless. The problem especially pops up when you choose an icon that, while significant to you, has no significance for your audience. In this situation, your audience will be faced with a series of acontextual (at least for them) icons with which they are expected to navigate your site. The only true universal solution for this problem is to create navigational elements that incorporate both text and images. If you include text that answers the user’s “what the heck is this button for” kinds of questions, you can use funky icons that fit into your visual metaphor.

Multiple Roads from Here to There

Lots of people do things in lots of different ways. People drive differently, have different tastes in movies and music, talk differently, eat differently, and most important to this discussion, use different methods to move about the Web. Some like to wander aimlessly until they stumble across something interesting, while others want to locate specific information as quickly and efficiently as possible. Some people use the newest browser on a fast machine with a fast Internet connection, while others have an older browser on a slower machine with a slow Internet connection. Some people use text browsers or screen readers. Get the point? It’s up to you to try to accommodate all of these “profiles” so that you don’t alienate possible visitors.

Note: A screen reader is a piece of software that “reads” the content of a website for those who are visually impaired or blind.



To ensure that your website is accessible to as wide an audience as possible, you have to create a navigational system that supports many different personal styles. For instance, provide a low-bandwidth version for those whose Internet connection and computer is on the slower side. You can also employ a series of different tools, such as a search feature, a site map, and a traditional text and icon menu, so that a user can choose how to move about your site.

