



Steve Krug

**DON'T
MAKE
ME**

THINK

A white hand cursor icon with a black outline, pointing upwards towards the word "THINK".

A Common Sense Approach to Web Usability

FOREWORD BY ROGER BLACK

*And you may find yourself, in a beautiful house, with a beautiful wife
And you may ask yourself, Well...How did I get here?*

—TALKING HEADS, “ONCE IN A LIFETIME”

It's a fact:

People won't use your Web site if they can't find their way around it.

You know this from your own experience as a Web user. If you go to a site and can't find what you're looking for or figure out how the site is organized, you're not likely to stay long—or come back. So how do you create the proverbial “clear, simple, and consistent” navigation?

Scene from a mall

Picture this: It's Saturday afternoon and you're headed for the mall to buy a chainsaw.

As you walk through the door at Sears, you're thinking, “Hmmm. Where do they keep chainsaws?” As soon as you're inside, you start looking at the department names, high up on the walls. (They're big enough that you can read them from all the way across the store.)



TOOLS

HOUSEWARES

LAWN AND GARDEN

“Hmmm,” you think, “Tools? Or Lawn and Garden?” Given that Sears is so heavily tool-oriented, you head in the direction of Tools.

When you reach the Tools department, you start looking at the signs at the end of each aisle.

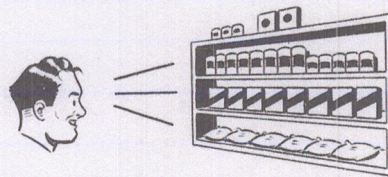


POWER TOOLS

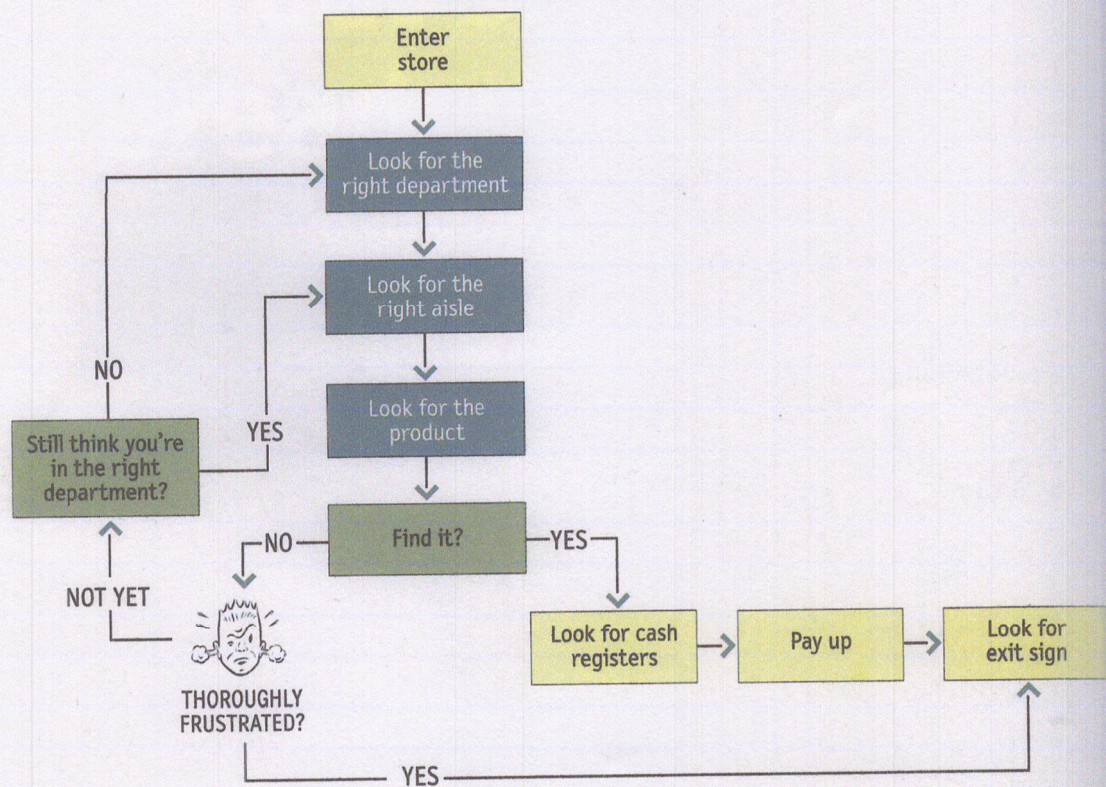
HAND TOOLS

**SANDING AND
GRINDING**

When you think you've got the right aisle, you start looking at the individual products.



If it turns out you've guessed wrong, you try another aisle, or you may back up and start over again in the Lawn and Garden department. By the time you're done, the process looks something like this:

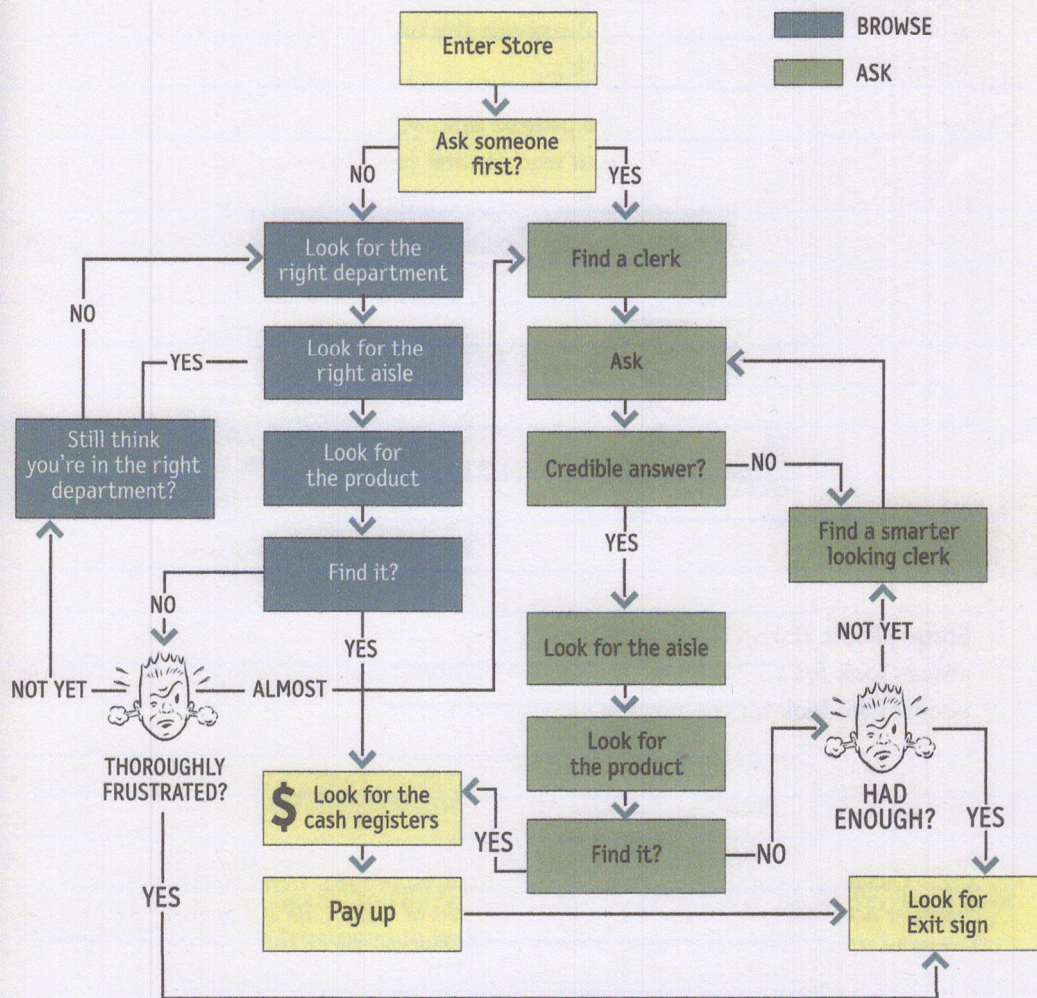


Basically, you use the store's navigation systems (the signs and the organizing hierarchy that the signs embody) and your ability to scan shelves full of products to find what you're looking for.

Of course, the actual process is a little more complex. For one thing, as you walk in the door you usually devote a few microseconds to a crucial decision: Are you going to start by looking for chainsaws on your own or are you going to ask someone where they are?

It's a decision based on a number of variables—how familiar you are with the store, how much you trust their ability to organize things sensibly, how much of a hurry you're in, and even how sociable you are.

When we factor this decision in, the process looks something like this:

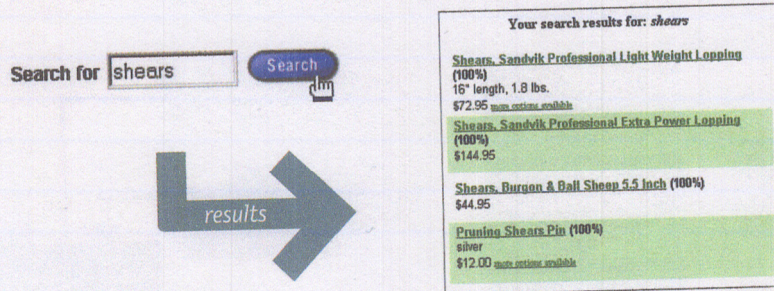


Notice that even if you start looking on your own, if things don't pan out there's a good chance that eventually you'll end up asking someone for directions anyway.

Web Navigation 101

In many ways, you go through the same process when you enter a Web site.

- **You're usually trying to find something.** In the “real” world it might be the emergency room or a can of baked beans. On the Web, it might be the cheapest 4-head VCR with Commercial Advance or the name of the actor in Casablanca who played the headwaiter at Rick's.¹
- **You decide whether to ask first or browse first.** The difference is that on a Web site there's no one standing around who can tell you where things are.² The Web equivalent of asking directions is searching—typing a description of what you're looking for in a search box and getting back a list of links to places where it *might* be.



Some people (Jakob Nielsen calls them “search-dominant” users)³ will almost always look for a search box as soon as they enter a site. (These may be the same people who look for the nearest clerk as soon as they enter a store.)

¹ S. Z. “Cuddles” Sakall, born Eugene Sakall in Budapest in 1884. Ironically, most of the character actors who played the Nazi-hating denizens of Rick’s Café were actually famous European stage and screen actors who landed in Hollywood after fleeing the Nazis.

² Some e-commerce sites (like LandsEnd.com) have started developing live personal assistance systems. These may turn out to be a good “safety net” for some users, but it’s hard to picture them ever becoming a cost-effective replacement for good navigation.

³ See “Search and You May Find” in Nielsen’s archive of his Alertbox columns on www.useit.com.

STREET SIGNS AND BREADCRUMBS

Other people (Nielsen's "link-dominant" users) will almost always browse first, searching only when they've run out of likely links to click or when they have gotten sufficiently frustrated by the site.

For everyone else, the decision whether to start by browsing or searching depends on their current frame of mind, how much of a hurry they're in, and whether the site appears to have decent browsable navigation.

- If you choose to browse, you make your way through a hierarchy, using signs to guide you. Typically, you'll look around on the Home page for a list of the site's main sections (like the store's department signs) and click on the one that seems right.



Then you'll choose from the list of subsections.



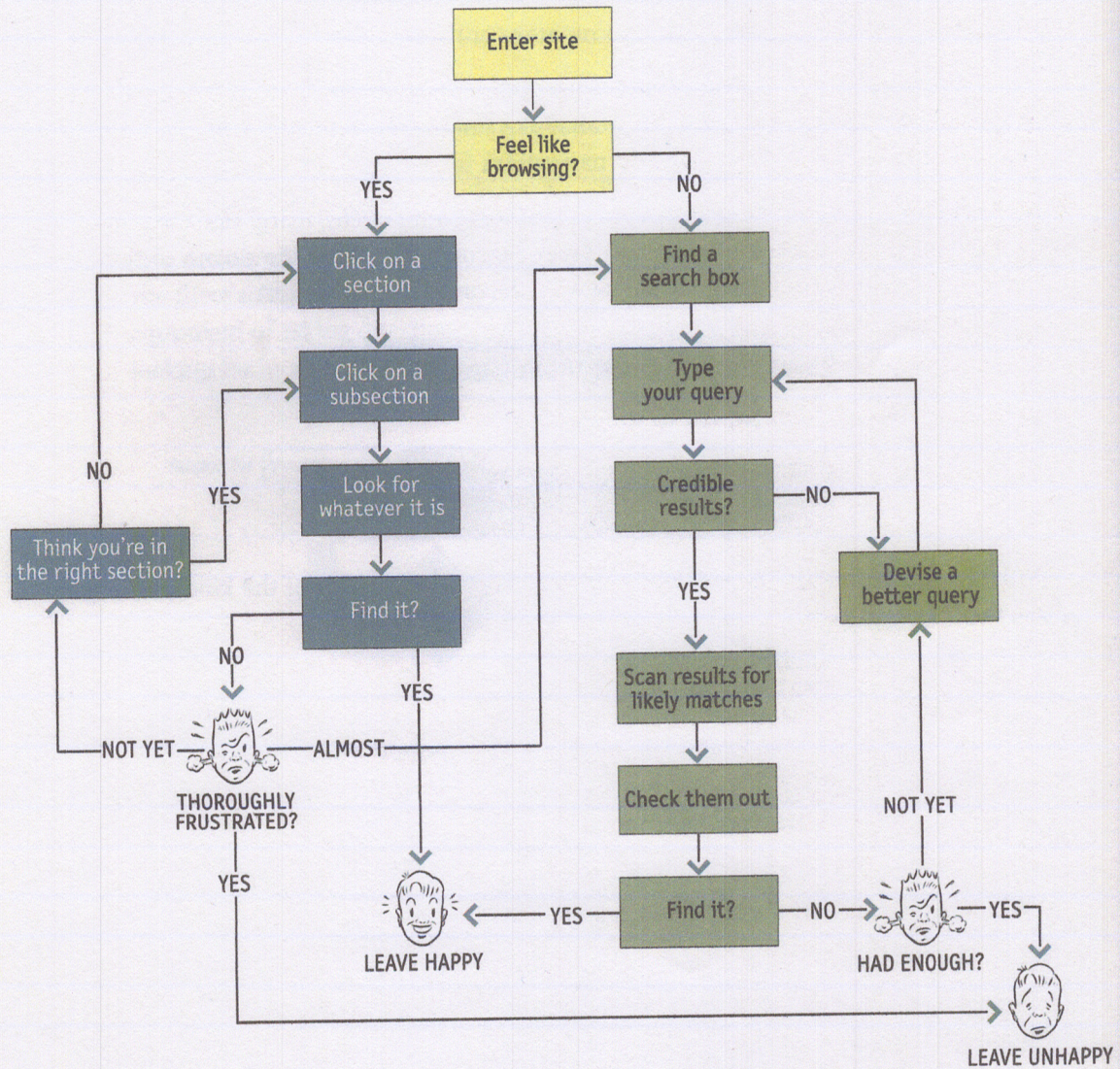
With any luck, after another click or two you'll end up with a list of the kind of thing you're looking for:

- [42cc Chain Saw](#)
- [6.5hp Log Splitter](#)
- [6.75hp Mower](#)
- [Backpack Blower](#)
- [Brushcutter](#)
- [Gas Blower/vac](#)
- [Pro 51cc Chain Saw](#)

Then you can click on the individual links to examine them in detail, the same way you'd take products off the shelf and read the labels.

- Eventually, if you can't find what you're looking for, you'll leave. This is as true on a Web site as it is at Sears. You'll leave when you're convinced they haven't got it, or when you're just too frustrated to keep looking.

Here's what the process looks like:



The unbearable lightness of browsing

Looking for things on a Web site and looking for them in the “real” world have a lot of similarities. When we’re exploring the Web, in some ways it even *feels* like we’re moving around in a physical space. Think of the words we use to describe the experience—like “cruising,” “browsing,” and “surfing.” And clicking a link doesn’t “load” or “display” another page—it “takes you to” a page.

But the Web experience is missing many of the cues we’ve relied on all our lives to negotiate spaces. Consider these oddities of Web space:

- **No sense of scale.** Even after we’ve used a Web site extensively, unless it’s a very small site we tend to have very little sense of how big it is (50 pages? 1,000? 17,000?). For all we know, there could be huge corners we’ve never explored. Compare this to a magazine, a museum, or a department store, where you always have at least a rough sense of the seen/unseen ratio.

The practical result is that it’s very hard to know whether you’ve seen everything of interest in a site, which means it’s hard to know when to stop looking.⁴

- **No sense of direction.** In a Web site, there’s no left and right, no up and down. We may talk about moving up and down, but we mean up and down in the hierarchy—to a more general or more specific level.
- **No sense of location.** In physical spaces, as we move around we accumulate knowledge about the space. We develop a sense of where things are and can take shortcuts to get to them.

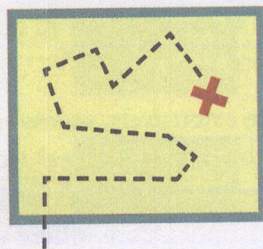
⁴ This is one reason why it’s useful for links that we’ve already clicked on to display in a different color. It gives us some small sense of how much ground we’ve covered.

We may get to the chainsaws the first time by following the signs, but the next time we're just as likely to think,

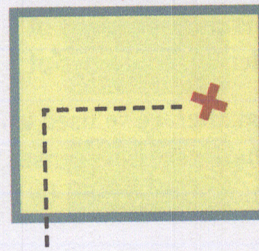
"Chainsaws? Oh, yeah, I remember where they were: right rear corner, near the refrigerators."

And then head straight to them.

FIRST TIME



SUBSEQUENT VISITS



But on the Web, your feet never touch the ground; instead, you make your way around by clicking on links. Click on "Power Tools" and you're suddenly teleported to the Power Tools aisle with no traversal of space, no glancing at things along the way.

When we want to return to something on a Web site, instead of relying on a *physical* sense of where it is we have to remember where it is in the conceptual hierarchy and retrace our steps.

This is one reason why bookmarks—stored personal shortcuts—are so important, and why the Back button accounts for somewhere between 30 and 40 percent of all Web clicks.⁵

It also explains why the concept of Home pages is so important. Home pages are—comparatively—fixed places. When you're in a site, the Home page is like the North Star. Being able to click Home gives you a fresh start.

This lack of physicality is both good and bad. On the plus side, the sense of

⁵ L. Catledge and J. Pitkow, "Characterizing Browsing Strategies in the World-Wide Web." In Proceedings of the Third International World Wide Web Conference, Darmstadt, Germany (1995).

weightlessness can be exhilarating, and partly explains why it's so easy to lose track of time on the Web—the same as when we're "lost" in a good book.⁶

On the negative side, I think it explains why we use the term "Web navigation" even though we never talk about "department store navigation" or "library navigation." If you look up *navigation* in a dictionary, it's about doing two things: getting from one place to another, and figuring out where you are.

I think we talk about Web navigation because "figuring out where you are" is a much more pervasive problem on the Web than in physical spaces. We're inherently lost when we're on the Web, and we can't peek over the aisles to see where we are. Web navigation compensates for this missing sense of place by embodying the site's hierarchy, creating a sense of "there."

Navigation isn't just a *feature* of a Web site; it *is* the Web site, in the same way that the building, the shelves, and the cash registers *are* Sears. Without it, there's no *there* there.

The moral? Web navigation had better be good.

The overlooked purposes of navigation

Two of the purposes of navigation are fairly obvious: to help us find whatever it is we're looking for, and to tell us where we are.

And we've just talked about a third:

- › **It gives us something to hold on to.** As a rule, it's no fun feeling lost. (Would you rather "feel lost" or "know your way around?") Done right, navigation puts ground under our feet (even if it's virtual ground) and gives us handrails to hold on to—to make us feel grounded.

But navigation has some other equally important—and easily overlooked—functions:

- › **It tells us what's here.** By making the hierarchy visible, navigation tells us what the site contains. Navigation reveals content! And revealing the site may be even more important than guiding or situating us.

⁶ Which may be one more reason why slow-loading pages are so bothersome: What's the fun of flying if you can only go a few miles an hour?

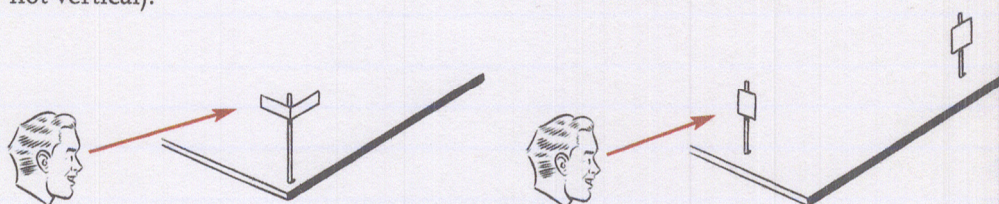
- **It tells us how to use the site.** If the navigation is doing its job, it tells you *implicitly* where to begin and what your options are. Done correctly, it should be all the instructions you need. (Which is good, since most users will ignore any other instructions anyway.)
- **It gives us confidence in the people who built it.** Every moment we're in a Web site, we're keeping a mental running tally: "Do these guys know what they're doing?" It's one of the main factors we use in deciding whether to bail out and deciding whether to ever come back. Clear, well-thought-out navigation is one of the best opportunities a site has to create a good impression.

Web navigation conventions

Physical spaces like cities and buildings (and even information spaces like books and magazines) have their own navigation systems, with conventions that have evolved over time like street signs, page numbers, and chapter titles. The conventions specify (loosely) the appearance and location of the navigation elements so we know what to look for and where to look when we need them.

Putting them in a standard place lets us locate them quickly, with a minimum of effort; standardizing their appearance makes it easy to distinguish them from everything else.

For instance, we expect to find street signs at street corners, we expect to find them by looking up (not down), and we expect them to look like street signs (horizontal, not vertical).

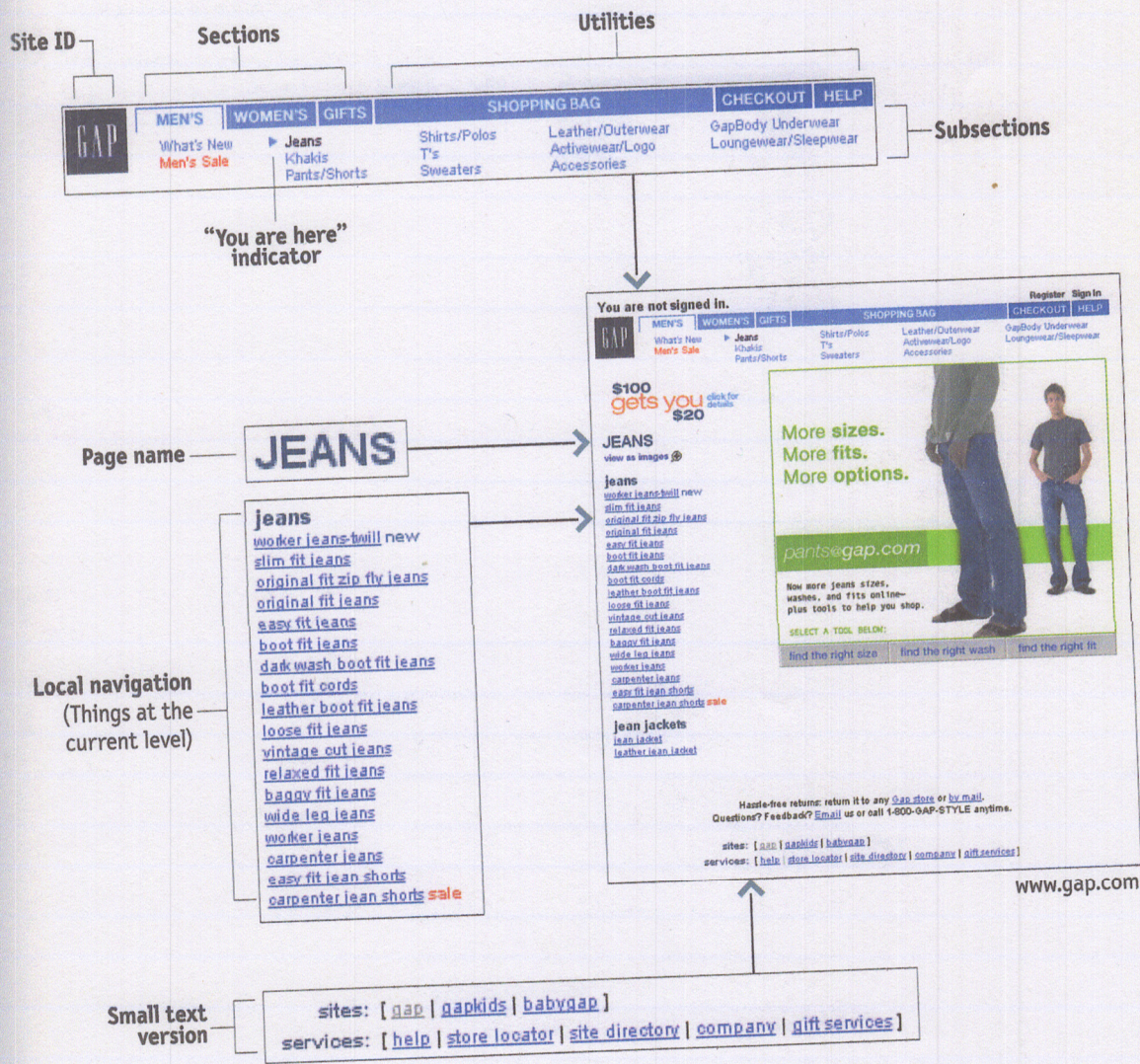


We also take it for granted that the name of a building will be above or next to its front door. In a grocery store, we expect to find signs near the ends of each aisle. In a magazine, we know there will be a table of contents somewhere in the first few pages and page numbers somewhere in the margin of each page—and that they'll look like a table of contents and page numbers.

STREET SIGNS AND BREADCRUMBS

Think of how frustrating it is when one of these conventions is broken (when magazines don't put page numbers on advertising pages, for instance).

Navigation conventions for the Web have emerged quickly, mostly adapted from existing print conventions. They'll continue to evolve, but for the moment these are the basic elements:



Don't look now, but I think it's following us

Web designers use the term *persistent navigation* (or *global navigation*) to describe the set of navigation elements that appear on every page of a site.

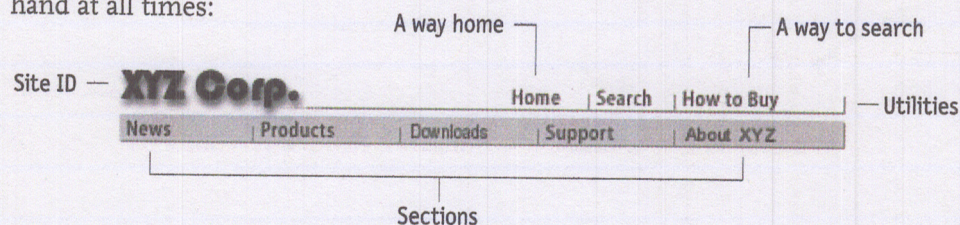


Done right, persistent navigation should say—preferably in a calm, comforting voice:

“The navigation is over here. Some parts will change a little depending on where you are, but it will always be here, and it will always work the same way.”

Just having the navigation appear in the same place on every page with a consistent look gives you instant confirmation that you're still in the same site—which is more important than you might think. And keeping it the same throughout the site means that (hopefully) you only have to figure out how it works once.

Persistent navigation should include the five elements you most need to have on hand at all times:



We'll look at each of them in a minute. But first...

Did I say every page?

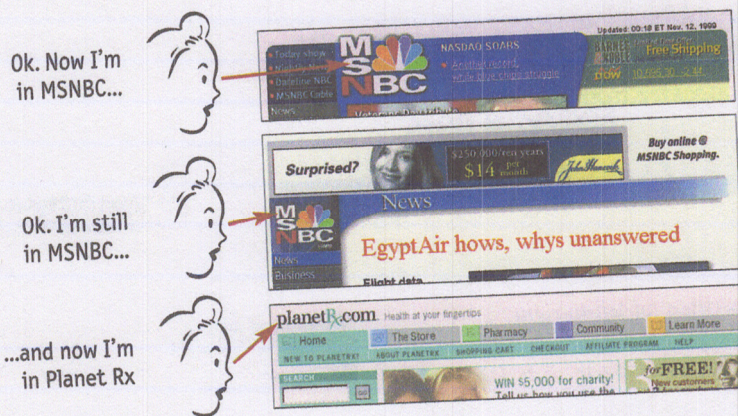
I lied. There are two exceptions to the “follow me everywhere” rule:

- > The Home page.** The Home page is not like the other pages—it has different burdens to bear, different promises to keep. As we’ll see in the next chapter, this sometimes means that it makes sense *not* to use the persistent navigation there.
- > Forms.** On pages where a form needs to be filled in, the persistent navigation can sometimes be an unnecessary distraction. For instance, when I’m paying for my purchases on an e-commerce site you don’t really want me to do anything but finish filling in the forms. The same is true when I’m registering, giving feedback, or checking off personalization preferences.

For these pages, it’s useful to have a minimal version of the persistent navigation with just the Site ID, a link to Home, and any Utilities that might help me fill out the form.

Now I know we’re not in Kansas

The Site ID or logo is like the building name for a Web site. At Sears, I really only need to see the name on my way in; once I’m inside, I *know* I’m still in Sears until I leave. But on the Web—where my primary mode of travel is teleportation—I need to see it on every page.



CHAPTER 6

In the same way that we expect to see the name of a building over the front entrance, we expect to see the Site ID at the top of the page—usually in (or at least near) the upper left corner.⁷

Why? Because the Site ID represents the whole site, which means it's the highest thing in the logical hierarchy of the site.

This site
Sections of this site
Subsections
Sub-subsections, etc.
This page
Areas of this page
Items on this page

And there are two ways to get this primacy across in the visual hierarchy of the page: either make it the most prominent thing on the page, or make it frame everything else.

Since you don't want the ID to be the most prominent element on the page (except, perhaps, on the Home page), the best place for it—the place that is least likely to make me think—is at the top, where it frames the entire page.



And in addition to being where we would expect it to be, the Site ID also needs to *look* like a Site ID. This means it should have the attributes we would expect to see in a brand logo or the sign outside a store: a distinctive typeface, and a graphic that's recognizable at any size from a button to a billboard.

University of Virginia



SEARS

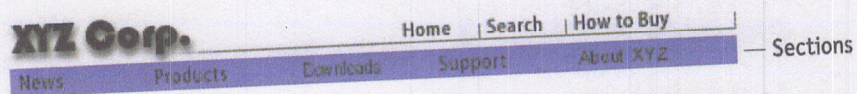
priceline.com

⁷ ...on Web pages written for left-to-right reading languages, that is. Readers of Arabic or Hebrew pages might expect the Site ID to be on the right.

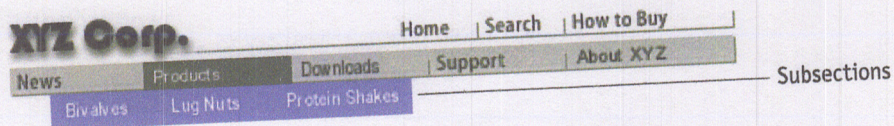


The Sections

The Sections—sometimes called the *primary navigation*—are the links to the main sections of the site: the top level of the site's hierarchy.

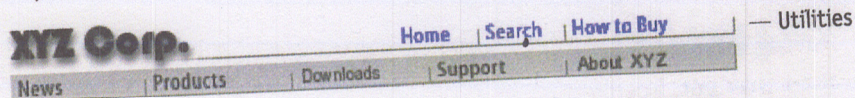


In most cases, the persistent navigation will also include space to display the *secondary navigation*: the list of subsections in the current section.



The Utilities

Utilities are the links to important elements of the site that aren't really part of the content hierarchy.



These are things that either can help me use the site (like Help, a Site Map, or a Shopping Cart) or can provide information about its publisher (like About Us and Contact Us).

Like the signs for the facilities in a store, the Utilities list should be slightly less prominent than the Sections.

Men's Shoes

- Restrooms ►
- ◄ Telephones
- ◄ Customer Service
- Gift Wrapping ►

Utilities will vary for different types of sites. For a corporate or e-commerce site, for example, they might include any of the following:

About Us	Downloads	How to Shop	Register
Archives	Directory	Jobs	Search
Checkout	Forums	My _____	Shopping Cart
Company Info	FAQs	News	Sign in
Contact Us	Help	Order Tracking	Site Map
Customer Service	Home	Press Releases	Store Locator
Discussion Boards	Investor Relations	Privacy Policy	Your Account

As a rule, the persistent navigation can accommodate only four or five Utilities—the ones users are likely to need most often. If you try to squeeze in more than that, they tend to get lost in the crowd. The less frequently used leftovers can be grouped together on the Home page.

Just click your heels three times and say, “There’s no place like home.”

One of the most crucial items in the persistent navigation is a button or link that takes me to the site’s Home page.

Having a Home button in sight at all times offers reassurance that no matter how lost I may get, I can always start over, like pressing a Reset button or using a “Get out of Jail free” card.

There’s an emerging convention that the Site ID doubles as a button that can take you to the site’s Home page. It’s a useful idea that every site should implement, but a surprising number of users still aren’t aware of it.

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⁸ Unfortunat
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For now, it's probably a good idea to either:

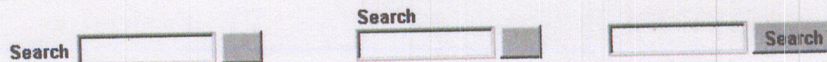
- › include a Home page link in either the Sections or the Utilities, or
- › add the word "Home" discreetly to the Site ID everywhere but the Home page to let people know that it's clickable.



A way to search

Given the potential power of searching⁸ and the number of people who prefer searching to browsing, unless a site is very small and very well organized, every page should have either a search box or a link to a search page. And unless there's very little reason to search your site, it should be a search box.

Keep in mind that for a large percentage of users their first official act when they reach a new site will be to scan the page for something that matches one of these three patterns:



It's a simple formula: a box, a button, and the word "Search." Don't make it hard for them—stick to the formula. In particular, avoid

- › **Fancy wording.** They'll be looking for the word "Search," so use the word Search, not Find, Quick Find, Quick Search, or Keyword Search. (If you use "Search" as the label for the box, use the word "Go" as the button name.)
- › **Instructions.** If you stick to the formula, anyone who has used the Web for more than a few days will know what to do. Adding "Type a keyword" is like saying, "Leave a message at the beep" on your answering machine message: There was a time when it was necessary, but now it just makes you sound clueless.

⁸ Unfortunately, I have to say "potential" because on most sites the odds of a search producing useful results are still about 50:50. Search usability is a huge subject in itself, and the best advice I can give is to pick up a copy of *Information Architecture for the World Wide Web* by Louis Rosenfeld and Peter Morville (O'Reilly, 1998) and take to heart everything they have to say about search.

- **Options.** If there is any possibility of confusion about the *scope* of the search (what's being searched: the site, part of the site, or the whole Web?), by all means spell it out.

Search 
THIS SITE

Search 
for a Book

But think very carefully before giving me options to limit the scope (to search just the current section of the site, for instance). And also be wary of providing options for how I specify what I'm searching for (search by title or by author, for instance, or search by part number or by product name).

I seldom see a case where the potential payoff for adding options to the persistent search box is worth the cost of making me figure out what the options are and whether I need to use them (i.e., making me think).

If you want to give me the option to scope the search, give it to me when it's useful—when I get to the search results page and discover that searching everything turned up far too many hits, so I *need* to limit the scope.

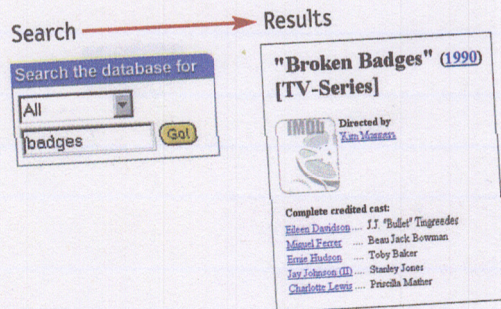
I think one of the primary reasons for Amazon's success is the robustness of its search. As I mentioned in Chapter 1, Amazon was one of the first online bookstores (if not *the* first) to drop the Title/Author/Keyword option from their search box and just take whatever I threw at them.

I've done several user tests of online bookstores, and left to their own devices, inevitably the first thing people did was search for a book they knew they should be able to find to see if the thing worked. And in test after test, the result was that people's first experience of Amazon was a successful search, while in sites that offered options many people were left puzzled when their search failed because they had misinterpreted their options.

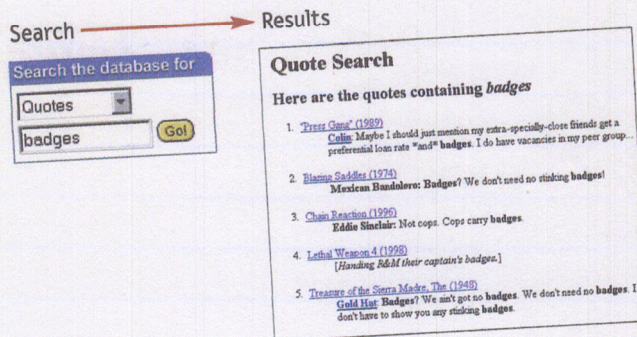
STREET SIGNS AND BREADCRUMBS

And of course, if you're going to provide options, you need to make sure that they actually work.

For instance, when I went looking for the "Stinking badges" quote from *Treasure of the Sierra Madre* on the Internet Movie Database site, my search for "badges" using the default scope "All" found only one match—an old TV show.



But when I changed the scope to "Quotes," there it was.



Care to take a guess what the effect was on my confidence in IMDB.com?