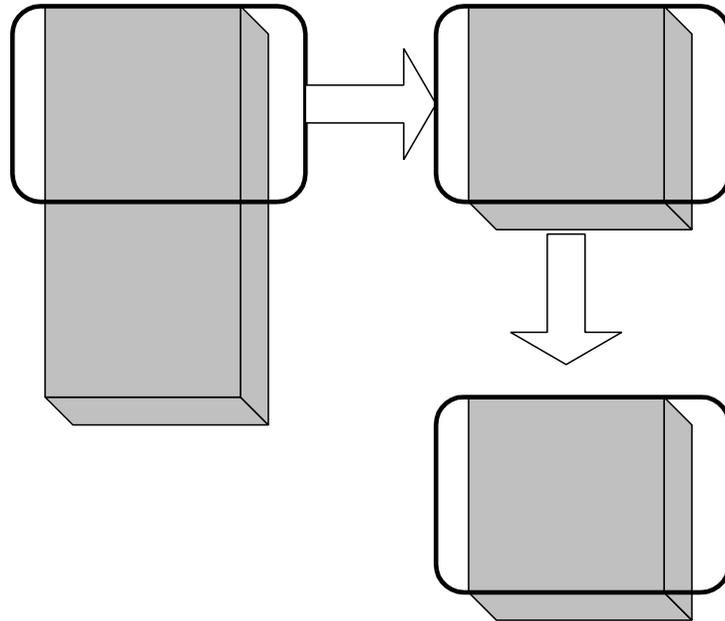# Reduce Scrolling

Scrolling disorients some people

You've had the experience. You scroll down, down, down—and discover you've gone past the topic you were looking for. So you scroll up, up, up—and go past it again.

Plus, once you've located and read the topic, you may not be sure where you are on the full page.

> Excessive scrolling can disorient computer users.
> Information that has scrolled off the screen is invisible,
> and therefore harder to remember. (Lynch, 2000)

Readers tend to remember where topics occur within the layout of a printed page. That memory is reinforced by the fact that an item stays put as the person reads through the page. But on the

Web, scrolling moves the item, pushing it out of sight, leaving users uncertain how long the page may be, and where the item may fall within its layout. Users can only see how the item relates to its nearest neighbors. With a fuzzier image of the item's place in the overall structure of the page, people have more trouble remembering the point.

> Very long Web pages tend to be disorienting, because they require the user to scroll long distances, and to remember the organization of things that have scrolled off-screen. (Lynch and Horton, 1997)

Some people don't scroll at all

When Jakob Nielsen first studied users, back in the early days of the Web, he found that only 10% of them would scroll "beyond the information that is visible on the screen when a page comes up" (1996). Year by year, more users are willing to scroll, at times. But many don't bother to scroll below the top of the page.

> Many participants want a Web page to fit on one screen. (Morkes and Nielsen, 1997)

Pack the top

The most important part of your site is the top of the page. That's the only area you can be sure your users will see. So show it off.

> Avoid requiring users to scroll in order to determine page contents. Users should be able to recognize immediately whether the subject of any given page interests them. (IBM, 1999)

Move up any information that you absolutely want to get across.

> For presentations that must grab people's attention to be successful, don't make the page longer than the window. (Levine, 1997)

For most people interviewed, paths were the predominant city elements, although their importance varied according to the degree of familiarity with the city. People with least knowledge of Boston tended to think of the city in terms of topography, large regions, generalized characteristics, and broad directional relationships.

—Kevin Lynch,
The Image of the City

No scrolling menus, please

The point of a menu is to let people choose between various options. When some of the options disappear, or never appear, the users have to guess, remember what they scrolled by, and they may make the wrong choice, and end up on irrelevant or dud pages.

> Most navigation pages should not scroll.
> (Microsoft, 2000)

But if you have a long list of links that form a single conceptual unit, such as a list of football teams or cities, you can allow scrolling because once people figure out the organizational scheme, they know how to troll for the link they want.

When scrolling is OK

Destination pages can go long. When users find the first screen interesting, they will deign to scroll through a few more screens of text. But not many.
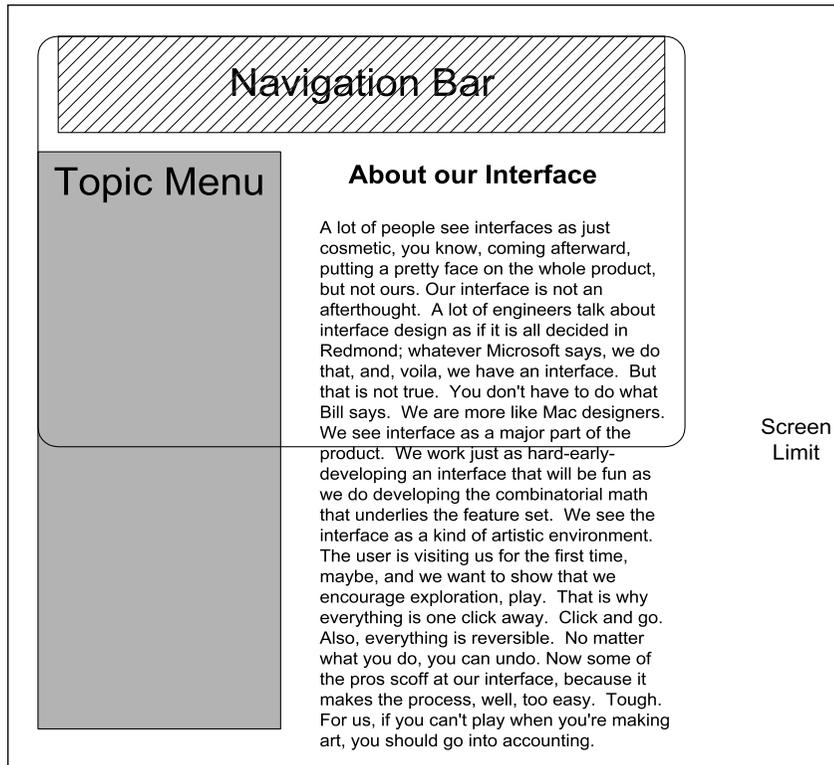
> Users will almost never scroll through very long pages.
> (Nielsen, 1999f)

Try rewriting to make the whole page shorter. Consider breaking the piece up into a series of shorter chunks, linked together. If you decide that the piece really hangs together as a single unit, show the whole article on one page. Users may dislike scrolling, but they hate waiting for another download.

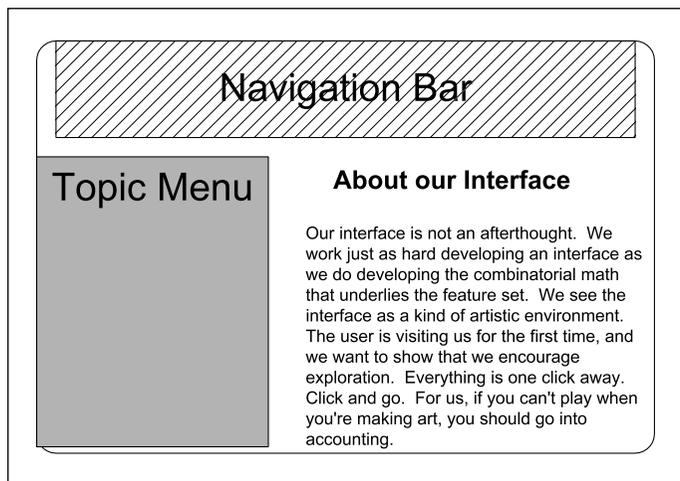> Content pages should contain one conceptual unit of content. In general, people prefer to scroll to continue a single unit of content like an article, skit, or short story, rather than click from page to page of an article.
> (Microsoft, 2000)

If you have a page that people will want to read at length, a scrolling page is tolerable. But you might provide a printer-friendly version, as we suggest in the next guideline.

Before

```
Navigation Bar

Topic Menu        About our Interface

                  A lot of people see interfaces as just
                  cosmetic, you know, coming afterward,
                  putting a pretty face on the whole product,
                  but not ours. Our interface is not an
                  afterthought.  A lot of engineers talk about
                  interface design as if it is all decided in
                  Redmond; whatever Microsoft says, we do
                  that, and, voila, we have an interface.  But
                  that is not true.  You don't have to do what
                  Bill says.  We are more like Mac designers.
                  We see interface as a major part of the
                  product.  We work just as hard-early-
                  developing an interface that will be fun as
                  we do developing the combinatorial math
                  that underlies the feature set.  We see the
                  interface as a kind of artistic environment.
                  The user is visiting us for the first time,
                  maybe, and we want to show that we
                  encourage exploration, play.  That is why
                  everything is one click away.  Click and go.
                  Also, everything is reversible.  No matter
                  what you do, you can undo. Now some of
                  the pros scoff at our interface, because it
                  makes the process, well, too easy.  Tough.
                  For us, if you can't play when you're making
                  art, you should go into accounting.
```

Screen Limit

After

```
Navigation Bar

Topic Menu        About our Interface

                  Our interface is not an afterthought.  We
                  work just as hard developing an interface as
                  we do developing the combinatorial math
                  that underlies the feature set.  We see the
                  interface as a kind of artistic environment.
                  The user is visiting us for the first time, and
                  we want to show that we encourage
                  exploration.  Everything is one click away.
                  Click and go.  For us, if you can't play when
                  you're making art, you should go into
                  accounting.
```

AUDIENCE FIT

If visitors want this...	How well does this guideline apply?
TO HAVE FUN	People who really, really like to read are willing to immerse themselves in very long pages, and prefer reading those to hopping about among arbitrarily short chunks. On the other hand, many people enjoy the breather they get when downloading the next short passage. Play scrolling any way you like.
TO LEARN	If you want someone to learn online, the short chunks work best. If you expect students to print and read off paper, who cares how long the page is?
TO ACT	Out of sight, out of action. Instructions that scroll always lose people. Try to get all the key steps in view at the same time. If not, work within two or three screens.
TO BE AWARE	Scrolling is a religious issue. Practice not getting self-righteous pro or con.
TO GET CLOSE TO PEOPLE	Whatever you write in the first screen determines whether I am willing to go on. In most cases, you should be able to say what you have to without going on and on and on.

See: Black & Elder (1997), Dillon (1994), IBM (1999), Farkas and Farkas (2000), Levine (1997), Lovelace and Southall (1983), Lynch (2000), Lynch and Horton (1997), Microsoft (2000), Morkes and Nielsen (1997), Nielsen (1997, 1999f), Rothkopf (1971).

For your review only.

Excerpt from *Hot Text: Web Writing that Works*.
(New Riders).