Steve Krug

DON'T MAKE ME THINK

revisited

A Common Sense Approach to Web and Mobile Usability

Don't Make Me Think, Revisited
A COMMON SENSE APPROACH TO WEB USABILITY

STEVE KRUG

New Riders

Don't Make Me Think, Revisited
A Common Sense Approach to Web Usability

First Edition

To my father, who always wanted me to write a book,

My mother, who always made me feel like I could,

*Melanie, who married me—the greatest
stroke of good fortune of my life,*

*and my son, Harry, who will surely write books
much better than this one whenever he wants to.*

Second Edition

To my big brother, Phil, who was a mensch his whole life.

Third Edition

*To all the people—from all parts of the world—who have
been so nice about this book for fourteen years.
Your kind words—in person, in email, and in your
blogs—have been one of the great joys of my life.*

*Especially the woman who said it made her laugh so hard
that milk came out of her nose.*

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THINGS YOU NEED TO GET RIGHT

MAKING SURE YOU GOT THEM RIGHT

LARGER CONCERNS AND OUTSIDE INFLUENCES

About this edition

I wrote the first edition of *Don't Make Me Think* back in 2000.

By 2002, I began to get a few emails a year from readers asking (very politely) if I'd thought about updating it. Not complaining; just trying to be helpful. "A lot of the examples are out of date" was the usual comment.

My standard response was to point out that since I wrote it right around the time the Internet bubble burst, many of the sites I used as examples had already disappeared by the time it was published. But I didn't think that made the examples any less clear.

Finally, in 2006 I had a strong personal incentive to update it.[1] But as I reread it to see what I should change, I just kept thinking "This is all still true." I really couldn't find much of anything that I thought should be changed.

If it was a new edition, though, *something* had to be different. So I added three chapters that I didn't have time to finish back in 2000, hit the snooze button, and happily pulled the covers back over my head for another seven years.

(Writing is really hard for me, and I'm always happy to have a reason not to do it. Give me a good old root canal over writing any day.)

So why now, finally, a new edition? Two reasons.

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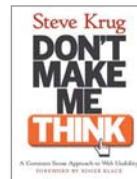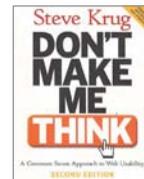
[1]   *Half of the royalties for the book were going to a company that no longer existed, and doing a new edition meant a new contract—and twice the royalties—for me.*

#1. Let's face it: It's old

There's no doubt about it at this point: It feels dated. After all, it's thirteen years old, which is like a hundred years in Internet time. (See? Nobody even says things like "in Internet time" anymore.)

Most of the Web pages I used for examples, like Senator Orrin Hatch's campaign site for the 2000 election, look really old-fashioned now.

Sites these days tend to look a lot more sophisticated, as you might expect.

www.orrinhatch.com 1999

www.orrinhatch.com 2012

Recently I've been starting to worry that the book would finally reach a point where it felt *so* dated that it would stop being effective. I know it hasn't happened yet because

- It's still selling steadily (thank heavens), without any sign of slowing down. It's even become required reading in a lot of courses, something I never expected.

- New readers from all over the world continue to tweet about things they've learned from it.

- I still keep hearing this story: "I gave it to my boss, hoping he'd finally understand what I'm talking about. He actually read it, and then he bought it for our whole team/department/company!" (I love that story.)
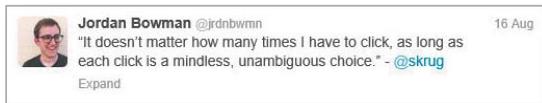
- People keep telling me that they got their job thanks in part to reading it or that it influenced their choice of a career. [2]

But I know that eventually the aging effect is going to keep people from reading it, for the same reason that it was so hard to get my son to watch black and white movies when he was young, no matter how good they were.

Clearly, it's time for new examples.

#2. The world has changed

To say that computers and the Internet and the way we use them have changed a lot lately is putting it mildly. Very mildly.

2000   2006   2013

iPhone   Last paper   Last email   Last holdout
appears   map is used   sent by anyone   on Earth joins
                 for directions   under 20   Facebook
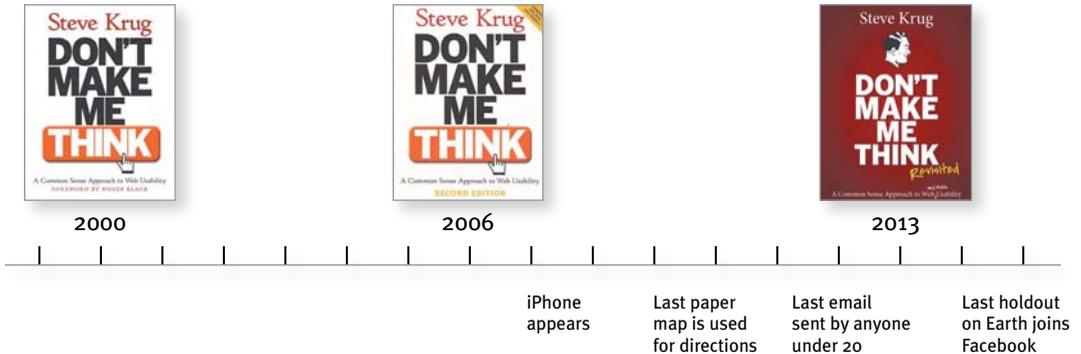
The landscape has changed in three ways:

- **Technology got its hands on some steroids.** In 2000, we were using the Web on relatively large screens, with a mouse or touchpad and a keyboard. And we were sitting down, often at a desk, when we did.

    Now we use tiny computers that we carry around with us all the time, with still and video cameras, magical maps that know exactly where we are, and

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[2] *I'm enormously pleased and flattered, but I have to admit there's always a part of me that's thinking "Yikes! I hope she wasn't meant to be a brain surgeon. What have I done?"*

our entire libraries of books and music built in. And are always connected to the Internet. Oh, and they're phones, too.

Heck, I can use my "phone" to
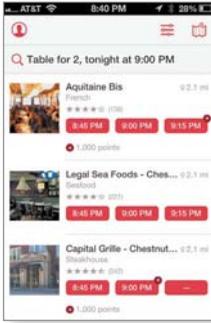
...book a restaurant reservation in seconds

...adjust the heat in my house from anywhere
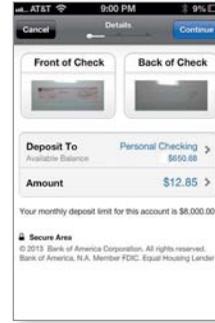
...or deposit a check without going to an ATM

It's no flying car (which, come to think of it, we were promised we'd have by now), but it's pretty impressive.

- **The Web itself kept improving.** Even when I'm using my desktop computer to do all the things I've always done on the Web (buying stuff, making travel plans, connecting with friends, reading the news, and settling bar bets), the sites I use tend to be much more powerful and useful than their predecessors.

We've come to expect things like autosuggest and autocorrect, and we're annoyed when we *can't* pay a parking ticket or renew a driver's license online.

- **Usability went mainstream.** In 2000, not that many people understood the importance of usability.

Now, thanks in large part to Steve Jobs (and Jonathan Ive), almost everyone understands that it's important, even if they're still not entirely sure what it is. Except now they usually call it User Experience Design (UXD or just UX), an umbrella term for any activity or profession that contributes to a better experience for the user.

It's great that there's now so much more emphasis on designing for the user, but all the new job descriptions, subspecialties, and tools that have come along with this evolution have left a lot of people confused about what they should actually *do* about it.

I'll be talking about all three of these changes throughout the book.

Don't get me wrong...

This edition has new examples, some new principles, and a few things I've learned along the way, but it's still the same book, with the same purpose: It's still a book about designing great, usable Web sites.

And it's also still a book about designing anything that people need to interact with, whether it's a microwave oven, a mobile app, or an ATM.

The basic principles are the same even if the landscape has changed, because usability is about people and how they understand and use things, not about technology. And while technology often changes quickly, people change very slowly.[3]

Or as Jakob Nielsen so aptly put it:

> The human brain's capacity doesn't change from one year to the next, so the insights from studying human behavior have a very long shelf life. What was difficult for users twenty years ago continues to be difficult today.

I hope you enjoy the new edition. And don't forget to wave in a few years when you pass me in your flying car.

STEVE KRUG
NOVEMBER 2013

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[3] *There's a wonderful Norwegian video (with subtitles) about this that shows a monk getting help as he struggles to use the newfangled "book." (Search for "medieval helpdesk" on YouTube.)*

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Animal, Vegetable, or Mineral?

WHY USERS LIKE MINDLESS CHOICES

Web designers and usability professionals have spent a lot of time over the years debating how many times you can expect users to click (or tap) to get what they want without getting too frustrated. Some sites even have design rules stating that it should never take more than a specified number of clicks (usually three, four, or five) to get to any page in the site.

On the face of it, "number of clicks to get anywhere" seems like a useful metric. But over time I've come to think that what really counts is not the number of clicks it takes me to get to what I want (although there are limits), but rather how *hard* each click is—the amount of thought required and the amount of uncertainty about whether I'm making the right choice.

In general, I think it's safe to say that users don't mind a lot of clicks *as long as each click is painless and they have continued confidence that they're on the right track*— following what's often called the "scent of information."[1] Links that clearly and unambiguously identify their target give off a strong scent that assures users that clicking them will bring them nearer to their "prey." Ambiguous or poorly worded links do not.

I think the rule of thumb might be something like "three mindless, unambiguous clicks equal one click that requires thought."[2]

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[1] *This term comes from Peter Pirolli and Stuart Card's "information foraging" research at Xerox PARC in which they drew parallels between people seeking information ("informavores") and animals following the scent of their prey.*

[2] *Of course, there are exceptions. For instance, if I'm going to have to drill down through the same path in a site repeatedly, or if the pages are going to take a long time to load, then the value of fewer clicks increases.*

The classic first question in the word game Twenty Questions—"Animal, vegetable, or mineral?"—is a wonderful example of a mindless choice. As long as you accept the premise that anything that's not a plant or an animal—including things as diverse as pianos, limericks, and cheesecake, for instance—falls under "mineral," it requires almost no thought to answer the question correctly.[3]

Unfortunately, many choices on the Web aren't as clear.

For example, as recently as a few years ago when I was trying to buy a product or service to use in my home office (like a printer, for instance), most of the manufacturers' sites asked me to make a top-level choice like this:

Which one was me? I had to think about it, and even when I made my choice I wasn't very confident it was the right one. In fact, what I had to look forward to when the target page finally loaded was even *more* thinking to figure out whether I was in the right place.

It was the feeling I get when I'm standing in front of two mailboxes labeled Stamped Mail and Metered Mail with a business reply card in my hand. What do *they* think it is—stamped or metered? And what happens if I drop it in the wrong box?

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[3] *In case you've forgotten the game, there's an excellent version that you can play against at www.20q.net. Created by Robin Burgener, it uses a neural net algorithm and plays a mean game.*

Here's another example:

I'm trying to read an article online. The page I arrive at gives me all these options:

Now I've got to scan all this text and work out whether I'm a subscriber but not a member, or a member, or neither one. And then I'll have to dig up the account number or the password that I used or decide whether it's worth joining.

At this point, the question I'm asking myself is probably changing from "How do I answer this question?" to "Just how interested am I in this article?"

The New York Times makes the same kind of choice seem much easier by not confronting you with all the details at once. Making an initial selection (to log in or to see your options for subscribing) takes you to another screen where you see only the relevant questions or information for that selection.
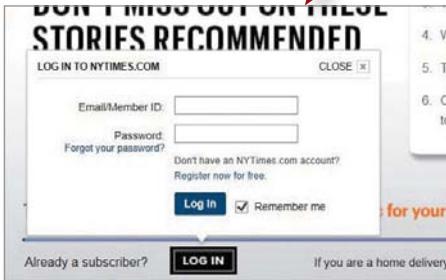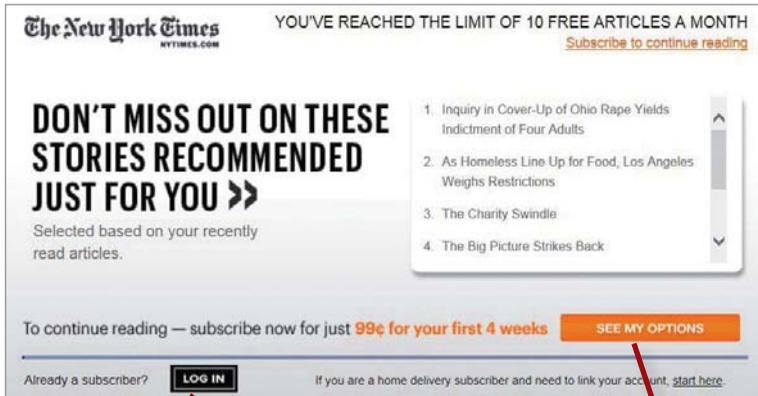
This problem of giving the user difficult choices and questions that are hard to answer happens all the time in forms. Caroline Jarrett has an entire chapter about it ("Making Questions Easy to Answer") in her book *Forms that Work: Designing Web Forms for Usability.*

As with Ginny Redish's book about writing for the Web, anyone who works on forms should have a well-worn copy sitting on their desk.
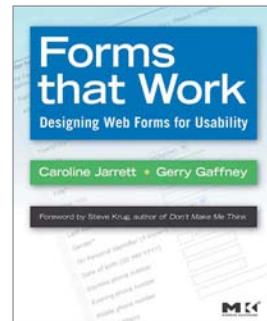
Some assistance may be required

Life is complicated, though, and some choices really aren't simple.

When you can't avoid giving me a difficult choice, you need to go out of your way to give me as much guidance as I need—but no more.

This guidance works best when it's

- **Brief:** The smallest amount of information that will help me

- **Timely:** Placed so I encounter it exactly when I need it

- **Unavoidable:** Formatted in a way that ensures that I'll notice it

Examples are tips adjacent to form fields, "What's this?" links, and even tool tips.

My favorite example of this kind of just-in-time guidance is found on street corners throughout London.

It's brief ("LOOK RIGHT" and an arrow pointing right), timely (you see it at the instant you need to be reminded), and unavoidable (you almost always glance down when you're stepping off a curb).

I have to think it's saved the lives of a lot of tourists who expect traffic to be coming from the other direction. (I know it saved mine once.)

Whether you need to offer some help or not, the point is that we face choices all the time on the Web and making those choices mindless is one of the most important things you can do to make a site easy to use.

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