

Don't Make Me Think

Steve Krug

- Technology changes quickly, but humans don't. Your brains don't behave that differently from one year to the next
- According to Krug, most of what he does (usability consulting) is common sense. But like common sense, it's not obvious until someone points it out to you
- If something requires a large investment of time - or looks like it will - it's less likely to be used
- Krug's definition of usability: a person of average (or even below average) ability and experience can figure out how to use the thing to accomplish something without it being more trouble than it's worth

Chapter 1: Don't Make Me Think - Krug's First Law of Usability

- Don't make me think!
 - Everything should be self-evident, obvious, self-explanatory
- When you create an interface, your job is to eliminate all the question marks in the person's thought balloons
- Things that make us think (unnecessarily):
 - "Cute" or clever names, marketing-induced names, company-specific names, unfamiliar technical terms
 - Is this clickable? Is that a link?
- Sure, it's a couple of milliseconds of extra thinking, but it does add up to your cognitive workload. If the designers don't take the time to craft a design that respects that, the confidence in the interface, and consequently, the org/company behind it, eventually erodes
- If you can't make something self-evident, at least make it self-explanatory
- Using an interface/product that doesn't make you think makes the whole experience feel effortless. That's the reason why sometimes people know the interface/product was good, but could never pin point why - they didn't have to think about anything. It was effortless

Chapter 2: How We Really Use the Web - Scanning, Satisficing, and Muddling Through

- How we think people will use the web:
 - Pore over each page
 - Read all of the carefully crafted text
 - Figuring out how things are organized
 - Weigh options before clicking things
- Reality:

- People glance over pages (if you're lucky)
- Scan over texts to look for interesting things
- Click on the first thing that catches their interest
- Analogy: we expect people to navigate our design like a product brochure, while in reality, it's really like looking at a billboard while driving 60 mph
- When we design, we put ourselves into the user's shoe -- a very attentive user. Learn to live with these facts:
 - We don't read pages. We scan them. Why?
 - We're usually on a mission to do something and we need it done quick
 - We know we don't need to read everything
 - We're good at skimming ever since we learned how to read
 - We don't make optimal choices. We satisfice
 - We don't always choose the most optimal option. We pick the first reasonable one -- a process called satisficing
 - We're usually in a hurry, so we satisfice instead of optimize
 - There's not a lot of penalty in wrong guessing
 - Guessing is more fun and seemingly takes less effort
 - We don't figure out how things work. We muddle through. Why?
 - It's not important to us. It's not the lack of intelligence, but the lack of caring
 - If we find something that works, we stick to it. The hurdle to find something more efficient is unimaginable hard to overcome, no matter how big the pay off is
 - So, if muddling through works, why bother?
 - There's a much better chance people will find what they're looking for if they don't have to muddle
 - They can have a better understanding of what the site offers
 - They feel smart and in control, making them come back for more
 - If life gives you lemons...
 - If your audience is going to act like you're designing billboards, then design great billboards!

Chapter 3: Billboard Design 101 - Designing for Scanning, not Reading

- Since people are skimming:
 - Take advantage of conventions
 - Create effective visual hierarchies
 - Break pages into clearly defined areas
 - Make clickable things obvious
 - Eliminate distractions
 - Optimize content format for scanning
- People sometimes shy away from conventions because there's no award for "Best Conventions Follower"
 - Conventions are critical and very useful

- Ex: stop signs, controls in car
- Don't reinvent the wheel. If you're going to innovate, make sure to understand the value of what you're replacing
 - Also make sure the replacement is either so clear and self-explanatory that there's no learning curve, or so good it's worth a small one
- Clarity trumps consistency
 - If something is clearer at the cost of inconsistency, favor the former
- Clearly defined areas:
 - The more important something is, the more prominent it is
 - Large heading, medium heading, small text
 - More whitespace offset and closer to top
 - Things that are logically related should be visually related
 - Group menu buttons together
 - Things are "nested" visually to show what's part of what
- Keep the noise down
 - When the page is shouting for your attention, you're mentally stressed. Everything can't be important
 - Clutter: don't have too much stuff. Everything is visual noise, so tread the water carefully
- Scanning-friendly format
 - Use plenty of meaningful headings
 - More space on top but less on bottom of each heading
 - Keep paragraphs short
 - If things can be bullet-listed, they probably should be
 - Highlight key terms

Chapter 4: Animal, Vegetable, or Mineral? - Why Users like Mindless Choices

- It's not the number of clicks to get from A to B, but rather how hard each click is, mentally
 - As long as each click is painless and reinforces the user's confidence that they're on the right track, they won't mind (with limit, of course)
 - This is called "scent of information"
- Some random rule of thumb:
 - 3 mindless, unambiguous clicks == 1 click that requires thought
- When clicks can't be mindless, assistance/guidance work best when they're brief, timely, and unavoidable

Chapter 5: Omit Needless Words - The Art of Not Writing for the Web

- Get rid of half the words on each page, then get rid of half of what's left
- If words are unnecessary, no one is going to read them
- Reducing words helps reducing the noise level on the page, makes useful content more prominent, and makes scrolling/skimming easier
- Skip the small talks -- go straight to the point

- Skip the instructions as well -- no one reads them

Chapter 6: Street Signs and Breadcrumbs - Designing Navigation

- People won't use your web site or app if they can't find their way around it
- You go through the same process when you look for something on a site or at Walmart:
 - You have a list of specific things to locate
 - You decide whether to ask (search) or browse first
 - Search-dominant will do the former while link-dominant the latter
 - If you choose to browse, you go through a hierarchy using the signs to guide you
 - You'll leave if you can't find what you're looking for eventually
- Challenges with websites
 - Unlike physical stores, you don't have a sense of how big a website is or how many pages it contains. You won't know when to stop looking right away
 - No sense of direction
 - No sense of location
 - You'll probably remember which aisle to go to the 2nd time you need to buy something at the store, but that's harder to find the exact link again on the website
- Navigation roles
 - The obvious: tells where you are and help you find whatever you're looking for
 - The not so obvious:
 - Should tell you what's here
 - Should tell you how to use the site, implicitly at least
 - Should give you confidence in the people who built it
 - Navigation should be persistent (i.e. it should follow every page and looks consistent). The only exception is forms
 - Don't create distractions
 - Use minimum navigation instead
 - Persistent navigation should only have 5 items max
 - Searching
 - Stick to the basic discoverability like "search", "find", or magnifying glass. Avoid things like "query", "go", and unrelated icons
 - Be aware if your search function only filter on certain criteria. "Advanced search" options can make it very complicated to search and use. Plus, do they even know what they're looking for anyway?
- Page titles are like street signs. They should be big and in the right place. Top left or top center would be ideal. Make it consistent
 - Make the page title match exactly or at least very similar to whatever was clicked on to get to the page

- Make "you are here" signifiers obvious in breadcrumbs and navigation hierarchy
 - Use > for separation
 - Bold face the last one is a good idea
- Tabs are visually distinctive and a slick way to organize the hierarchy horizontally
- The trunk test: pick a random page on the site without pre-existing knowledge of how you got to the page and see if you can still tell where you are, what the page's title is, and how to go back/to different pages

Chapter 7: The Big Bang Theory of Web Design - The Importance of Getting People off on the Right Foot

- The home page has to do a lot of things
 - Site identity and mission: why I should be here and not other sites
 - Hierarchy: what I can find/do here and where/how
 - Other timely contents
 - Create credibility and trust
- The home page is a one-size fits all and a very daunting first date. Users need to know unambiguously and effortlessly: This is the Big Bag theory of web design
 - What is this?
 - What do they have here?
 - What can I do here?
 - Why should I be here?
- How to get the big picture message across
 - The tagline -- right below the Site's ID
 - The Welcome blurb: first prominent text blob you see
 - The "learn more" button
 - Use enough white space
 - Mission statement is not a welcome blurb
 - Test the page by outsiders
- Tag lines
 - Good tag lines are clear and informative
 - Good length: 6-8 words
 - Could be clever but not obscure
- The 5th question: Where do I start?

Chapter 8: The Farmer and the Cowman Should Be Friends - Why Most Arguments about Usability Are a Waste of Time, and How to Avoid Them

- Most UX debates are like religious debates because they consist largely of people expressing their strongly-held convictions and result in no one changing their point of view
- As developers/designers, we are also the users, so we often infuse our own

likes/dislikes into the design

- Bad assumption: average user is like us
 - Even worse: average use is like anything
 - There is no average user. All web users are unique and web use is basically idiosyncratic
- Wrong question for debate: do most people like pull-down menus?
 - Better: does this pull-down menu with these items and this wording in this context on this page make a good experience for most people who are likely to use this website/app?

Chapter 9: Usability Testing on 10 Cents a Day - Keeping Testing Simple So You Do Enough of It

- Usability testing is not focus group testing nor is it a way to prove a point
 - It's about watching a person trying to do a task and identify potential problems with that experience
- Testing 1 person is 100% better than testing none
- Testing 1 person early in the project is much better than 50 toward the end
- DYI testing:
 - Do it one morning a month so that you're done with testing for the entire month by early afternoon
 - Loosely recruit 3 people per each 1-hour session
 - You're not proving anything. That requires large scale quantitative testing. You're trying to identify and fix usability issues. The result is actionable insights not proof
 - You don't need to find all the problems. In fact, you can't
- Loosely pick your participants and grade on a curve
 - It's not a good idea to design something only your target audience can use
 - We're all beginners under the skin. Experts can be people who muddle through at a higher level
 - Everyone appreciates clarity

Chapter 10: Mobile: It's Not Just a City in Alabama Anymore

- It's all about trade offs. Wherever there is constraints, there will be trade offs. Good design essentially comes down to making the right sacrifice
- The most obvious constraint is the screen size. Make sure the content is still viewable on any form factor. Eliminate the need for people to zoom in to read your content
- Separate mobile URL is evil. Don't do it
- Don't hide buttons' or text fields' affordances
- Hover is not an option, so loose the coupling between hover and your design
- Design must be learnable and memorable. Follow the OS' convention for standard controls

Chapter 11: Usability as Common Courtesy

- The reservoir of goodwill
 - We start with a certain amount and depending on how well or how shit the design is, our reservoir goes up or down accordingly
 - Reservoir is idiosyncratic. Some have more than others. You can't count on a large reserve
 - It's situational - so you might have to compensate for a bad experience caused by something else
 - You can refill it if you can convince me you're after my best interests
 - A single mistake can empty everything
- Things that diminish goodwill
 - Hiding information that I want
 - Hide price information so I won't back out because I'm so far in the process
 - Hide phone number so I can't call you
 - Punishing me for not doing things your way
 - Don't make me jump through hoops to put in my phone number or social security number. Screw parentheses and dashes
 - Ask me for information you don't need
 - Shucking and jiving me. "Your call is important to us" - B.S.
 - Putting sizzle in my way. I'm in a hurry - get me out of these 5,000 feel-good marketing photos
 - Amateurish looks
- Goodwill increaser
 - Know the main things people want to do on your site and make them obvious and easy
 - Tell me what I want to know and no more
 - Save me steps when possible
 - Put effort into it
 - Know what questions I might have and answer them
 - Make it easy to recover from errors
 - When in doubt, apologize

Chapter 12: Accessibility and You

- Why accessibility is important:
 - Every population has people with disability of some form
 - Accessibility benefits everyone. If a normal user has trouble using your design, think about the disabled
 - It's the right thing to do
- Fix the things that confuse everyone, not just the disabled
- Low hanging fruits
 - Put null for alt attribute on images that should be ignored and descriptive text for the rest

- Use the heading elements appropriately for titles and sub headers. Use CSS for styling and sizes
- Make content available by keyboard
- Make text contrast background for legibility

Chapter 13: Guide for the Perplexed

- The usual advice of getting management to be interested in usability: speak in terms of ROI or MBA language. That's not always efficient
- Try having them watch an actual usability test. Chances are people who have never seen one will stay for more than the 5 minutes they intended to
- Watching a live study is a thousands times better than watching a recording. Ever ask why people go to the game instead of watching the recap?
- Do the prep stuff yourself with little resources
- If you want concrete advices...
 - Don't put labels in form fields
 - Don't use small or low contrast fonts
 - Don't float headings between paragraphs