HCI: CONTENT LAYOUT

Dr Kami Vaniea
Many of the examples in this lecture are drawn from this book.
Affordance and Metaphores
Affordance

• “An attribute of an object that allows people to know how to use it.” -- ID book
• To afford means to “give a clue”
• It should be obvious how to interact with an object
• Mouse buttons look like they should be clicked down

Cup handles are an obvious affordance. They afford grasping and lifting.
Handles on doors afford pulling

Plates on doors afford pushing

No signs required
Metaphors vs affordances

**Affordance**
The button shape is an affordance, it affords pressing

**Affordance**
Affords grasping the circle to pull it side to side

**Metaphor**
Matching the real world pause button of tape players
Website structure
The human eye is really good at seeing some things and bad at others
They eye is the most detailed at its center, where your focus is.

On the edges things are blurry, but you can easily see movement.
They eye is the most detailed at its center, where your focus is.

On the edges things are blurry, but you can easily see movement.
Let me tell you a web search story…
I wanted to figure out where a bit.ly link went because it was in a suspicious email (I’m paranoid)

I remembered that bit.ly has statistics pages for all URLs that list the destination URL

So I used DuckDuckGo to search for: bit.ly url number of click statistics

And found this page:
How to see number of clicks statistics of bitly URLs
Written by Davinder Singh Kainth

bit.ly is hugely popular URL shortening service among others like tinyurl. Besides the basic functionality of shortening URLs, it also provide feature for URL analysis. You can track number of clicks, locations, referrers, time of clicks for any bitly URL without having to register, login or install any software.

View clicks stats of any Bit.ly URL


Download Avatar movie Windows 7 theme

17 Clicks
The bit.ly link bit.ly/7GidPK was added by tweetdeckapi

17 Total Clicks
All clicks on the aggregate bit.ly link bit.ly/4DUxZv

Long Link: http://www.totethepc.com/archives/download-avatar-movie-windows-7-theme/
Conversations: 5
Locations: United States 12; Other 2; Indonesia 1
Share / Copy Link: Share | Copy

Ghostery blocked comments powered by Facebook Connect.
Except I’m trying to solve a problem, not read a website. So what I saw looked more like this:
number of clicks statistics
View clicks stats of any Bit.ly URL

To view stats of any Bit.ly url, just add "c" to the end. For example, for an "http://bit.ly/12345" url, enter "http://bit.ly/12345c" and view all the statistics for this shortened url.
How to see number of clicks statistics of bitly URLs

Bitly is hugely popular URL shortening service among others. The reason? Besides the basic functionality of shortening URLs, it also provides features like clicks analysis. You can track number of clicks, locations, referrals, time of clicks for any bitly URL, without having to register, login or install any software.

View clicks status of any Bit.ly URL

To view status of any bit.ly URL just add "+" sign at the end. For example, for bit.ly/5IdPM, add "+" at the end to get bit.ly/5IdPK+

just add "+" sign
"http://bit.ly/7GidPK+"
So I added a + to my URL and landed here which is what I was looking for.
For me this was a very usable webpage

- I could quickly see it was the correct place
- Section title used language that matched my search
- Data I needed was bolded and had an example which was also bold
We don’t read, we scan

- We typically want something

- We know that we don’t actually need to read everything

- We are good at scanning
Humans are surprisingly bad at reading text and very good at pattern matching.

So when skimming we don’t read, we pattern match *(words can be patterns)*.

Then read once we find something that looks worth reading.
You don’t need to be able to read something to know what it means.
What is the document to the right?

Can you tell what the content is even if you cannot read it?
Annual Report from the Inuit People in Canada

Board of Directors

Natan Obed
President
Inuit Tapiriit Kanatami

Natan Obed is the President of Inuit Tapiriit Kanatami. He is originally from Nain, the northernmost community in Labrador’s Nunatsiavut region, and now lives in Ottawa. For 10 years he lived in Iqaluit, Nunavut, and worked as the Director of Social and Cultural Development for Nunavut Tunngavik Inc. He has devoted his career to working with Inuit representational organizations to improve the wellbeing of Inuit in Canada.

Duane Smith
Chair and CEO
Inuvialuit Regional Corporation

Duane Smith is the Chair and CEO of the Inuvialuit Regional Corporation, whose mandate is to receive Inuvialuit lands and financial compensation resulting from the 1984 Inuvialuit land claims settlement. From 2002 to 2016, he was President of Inuit Circumpolar Council Canada, and served as Chair of the Inuvik Community Corporation for six terms starting in 2004.

Cathy Towtongie
President
Nunavut Tunngavik Incorporated

Cathy Towtongie first entered politics in 1973 as Secretary Treasurer of Inuit Tapirisat of Canada. In 2001, she was elected President of Nunavut Tunngavik Incorporated, the organization responsible for ensuring that promises made under the Nunavut Land Claims Agreement are carried out.
Proximity and the overlapping of the photo naturally make you group the two bits of text with the photo.

The two bits of text are also different colors causing a natural grouping even without the line.
Think-pair-share

- I am going to show you three news sites (20s each)
- For each site figure out how to:
  - Play a news video
  - Get to a different section (like sports, or finance)
  - Search for something
  - Share on social media
- The hard bit:
  - How do you know?
Meaht al-jerghi fi ashtabakat bi-sabt al-Estifta al-Katalonya

أعلنت كتالونيا إصابة 337 شخصًا بجراح تعرسهم في أطراف إسبانيا. وأعلنت الحكومة الإسبانية إصابة 11 امرأة، ولا يزالون آمنين مع إجراءات مدنية على عرفنة.

 gìزة في مهب التحولات
Catalonia condemns Spanish government action as 465 injured in clashes with police

FC Barcelona bars public from match amid Catalan vote chaos

Riot police break into polling station

In photos: Rubber bullets and blocked polling stations

Catalan referendum, explained
Think-pair-share

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  - Get to a different section (like sports, or finance)
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- The hard bit:
  - How do you know?
Websites need to be designed more like billboards than like books or newspapers
When building a website you should:

- Take advantage of conventions
  - Do not re-invent the wheel
- Create effective visual hierarchies
- Break pages up into clearly defined areas
- Make it obvious what can be clicked
- Eliminate distractions
- Setup content so it is easy to scan
<table>
<thead>
<tr>
<th>Books</th>
<th>Section Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Movies</td>
<td></td>
</tr>
<tr>
<td>Games</td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td>Music</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Computer Books</strong></td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td>Music</td>
</tr>
</tbody>
</table>
Create effective visual hierarchies

- The more important something is the more prominent it is
- Things that are related logically are related visually
- Things that are nested visually show what’s part of what
Important things are prominent

Very important

A little less important

Nowhere near as important
Logically related are also visually related

<table>
<thead>
<tr>
<th>Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
</tr>
<tr>
<td>Movies</td>
</tr>
<tr>
<td>Games</td>
</tr>
</tbody>
</table>
Visual nesting shows hierarchy

Your Cart

Shopping item 1
This is a super great product with lots of potential for making you happy
$3.20

Shopping item 2
This is a super great product with lots of potential for making you happy
$9.20
What kinds of information do we collect?

Depending on which Services you use, we collect different kinds of information from or about you.

**Things you do and information you provide.**
We collect the content and other information you provide when you use our Services, including when you sign up for an account, create or share, and message or communicate with others. This can include information in or about the content you provide, such as the location of a photo or the date a file was created. We also collect information about how you use our Services, such as the types of content you view or engage with or the frequency and duration of your activities.

**Things others do and information they provide.**
We also collect content and information that other people provide when they use our Services, including information about you, such as when they share a photo of you, send a message to you, or upload, sync or import your contact information.

**Your networks and connections.**
Predatory Loans

Most mortgage professionals are trustworthy and provide a valuable service, helping you to buy or refinance your home. But dishonest or “predatory” lenders do exist and engage in practices that increase the chances of borrowers losing their homes to foreclosure. To avoid becoming a victim of predatory lending, you need to understand the process to buy a home and be a smart consumer.

What Is Predatory Lending?

Predatory lenders, appraisers, mortgage brokers and home improvement contractors could use any of these tactics to take away your home or investments:

- Sell properties for much more than they are worth using false appraisals.
- Encourage borrowers to lie about their income, expenses, or cash available for down payments in order to get a loan.
- Knowingly lend more money than a borrower can afford to repay.
- Charge high interest rates to borrowers based on their race or national origin and not on their credit history.
- Charge fees for unnecessary or nonexistent products and services.

Avoid Predatory Loans by Being a Smart Consumer

To avoid becoming a victim of predatory lending, follow these guidelines:

- Before you buy a home, attend a homeownership education course offered by a U.S. Department of Housing and Urban Development (HUD)-approved, non-profit counseling agency.
- Interview several real estate professionals (agents), and ask for and check references before you select one to help you buy or sell a home.
- Get information about the prices of other homes in the neighborhood. Don’t be fooled into paying too much.
- Hire a qualified and licensed home inspector to carefully inspect the property before you are obligated to buy. Determine whether you or the seller will be responsible for paying for the repairs.
- Shop for a lender and compare costs. Be suspicious if anyone tries to steer you to just one lender.

If you believe you have been a victim of predatory lending, you can find a list of federal, state, and local resources at the HUD Office of Housing Counseling.

https://www.usa.gov/mortgages
Now let's talk about some of the basics of displaying text
Common issues with text

- Uncommon or unfamiliar vocabulary
- Difficult scripts and typefaces
- Tiny fonts
- Text on noisy backgrounds
- Information buried in repetition
- Centered text
- Too much text (You can usually delete half of most text)
Uncommon or unfamiliar vocabulary

Symantec Alert

The server pgpuniversal.iu.edu has presented an authentication certificate which is not valid for the following reason:

- Server pgpuniversal.iu.edu presented a TLS certificate for a domain name which does not match (rap.nnu.com)

You may choose to accept this authentication certificate every time you connect to this server, or only allow it for this session. You may also abort the connection by clicking Deny.

Always Allow for This Site  Allow  Deny
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Consider this shape

What word is it?
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Keyboard and Documentation
Configure your MacBook with the following language options along with the language of the included user documentation.

- Backlit Keyboard (English) / User’s Guide
- Backlit Keyboard (Western Spanish) / User’s Guide
- Backlit Keyboard (French) / User’s Guide
- Backlit Keyboard (Japanese) / User’s Guide
Keyboard and Documentation
Configure your MacBook with the following language options along with the language of the included user documentation.

Backlit Keyboard and User’s Guide in:
- English
- Western Spanish
- French
- Japanese
Information buried in repetition
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Think-pair-share

- I will show three web pages for 20 seconds each
- Answer the following questions about the site:
  - What site is this?
  - What is the purpose of this site?
  - Any errors
  - Any good elements
Philip Wadler's home page

Projects

Interested in applying for a PhD or Internship?

From Data Types to Session Types: A Basis for Concurrency and Distribution, an EPSRC Programme Grant, joint with Simon Gay, Glasgow, and Nobuko Yoshida, Imperial.

TypeScript: The Next Generation funded by a Microsoft Research PhD Scholarship.

Centre for Doctoral Training in Pervasive Parallelism, studentships available for cohort starting September 2016.

Currently:

- Professor of Theoretical Computer Science, Laboratory for Foundations of Computer Science, School of Informatics, University of Edinburgh (2003–).

http://homepages.inf.ed.ac.uk/wadler/
SpeechTrans Smartwatch
Version 4 Quad Core
$199.00 / 365 days / year

SpeechTrans Bluetooth Wristband
$99.00 / 365 days

SpeechTrans Wireless Translating Bluetooth Headphones Earbuds
$149.00 / 365 days / year

Download now from the App Store and Google play

Schedule a meeting

Get A Quote

http://speechtrans.com/#
Questions?