First, the news...
Why do I even have books? I'm a computer scientist isn't everything online?
Why do I even have books? I’m a computer scientist isn’t everything online?

My most used books are actually the HCI ones
Books I use most often

- Class textbooks (to assign readings)
- Statistics books
  - Discovering statistics using R
  - How to Design and Report Experiments
- Qualitative analysis books
  - Qualitative Data Analysis
  - Qualitative Coding Handbook
- Psychology books
  - An Introduction to Applied Cognitive Psychology
  - Thinking Fast and Slow
- Data visualization books
- HCI methods books (to look up details of methods someone mentioned but I haven’t used before)
  - Usability Inspection Methods
  - Contextual Inquiry
  - Usability Engineering
  - Universal Methods of Design
  - Universal Principles of Design
  - Learning from Strangers (how-to book for interviews and focus groups)
  - Case Study Research
From Thursday...
Many of the examples in this lecture are drawn from this book.
Website Structure
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
Let me tell you a web search story from last night...
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

Except I’m trying to solve a problem, not read a website. So what I saw looked more like this:
number of clicks statistics
How to see number of clicks statistics of bit.ly URLa

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

View clicks stats of any Bit.ly URL

To view stats of any Bit.ly URL, just add "stats" to the end. For example, for URL "http://bit.ly/example", use URL "http://bit.ly/example/stats"; the URL will redirect to "http://bit.ly/example/stats" and show all the statistics for this shortened URL.
How to see number of clicks statistics of bitly URLs

Bitly is a hugely popular URL shortening service among others. The tool provides the basic functionality of shortening URLs, it also offers features for link analysis. You can track number of clicks, locations, referrals, time of clicks for any bitly URL without having to register, log-in or install any software.

View clicks stats of any Bit.ly URL

To view stats of any bit.ly URL, just add "+" sign at the end. For example, for a URL "http://bit.ly/1234567890" you can view stats at "http://bit.ly/1234567890+" and check all the statistics for this shortened URL.

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

Actual URL 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

1. We typically want something

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

3. 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?
บادية يحرض مقاتليه على مهاجمة دول المنطقة

دعا أبو بكر البغدادي زعيم تنظيم الدولة مقاتليه التحالف للاستعداد والانسحاب من الموصل، مشيرًا إلى عدم التحالف مع الدولة، أفاد البغدادي مقاتليه على مهاجمة تركيا والسعودية. دعا أبو بكر البغدادي، زعيم تنظيم الدولة، إلى مهاجمة دول المنطقة، موضحاً أن التنظيم قد استمر في استخدام القوة بحتية على حدودها.

#بوكوحرس
#معركة الموصل
#البغدادي
#الدفاع
#الاسترداد
#القمة
Angelina Jolie Wins Sole Custody of Her Children

The former couple's six children will remain in Jolie's care.

Cosmopolitan

Brad Pitt Will Walk First Red Carpet Since Angelina Jolie Split at People

Statement: Pitt-Jolie children will remain in actress' care

WPVI – Philadelphia

Wall Street Furious Over New Trading Algorithm

4 Students prove their Crazy, Money-Making System, worth Millions, on live TV

Ultimate4Trading

Dems find early scapegoat in FBI Director Comey

Democratic strategists will spend years seeking answers to how they could
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?
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>
</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>
<th>Music</th>
<th>Movies</th>
<th>Games</th>
</tr>
</thead>
</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.**
Questions?