## HCI: WEB DESIGN

Dr Kami Vaniea

### First, the news...



### My Bookshelf



### My Bookshelf



- 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...

## **Computer Books Books** Music **Computer Books Movies Books** Games Music Movies Games

Many of the examples in this lecture are drawn from this book

Steve Krug



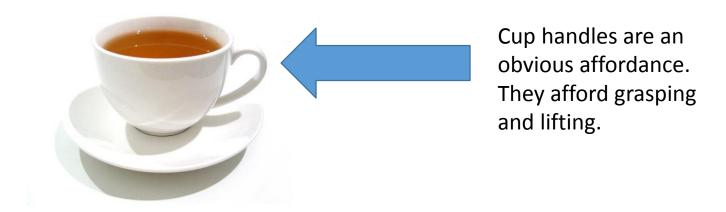
# DON'T MAKE ME THINK

A Common Sense Approach to Web Usability

### Website Structure

### <u>Affordance</u>

- "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



Handles on doors afford pulling

Plates on doors afford pushing

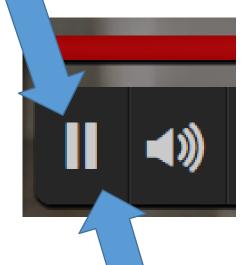
No signs required



### Metaphors vs affordances

#### **Affordance**

The button shape is an affordance, it affords pressing



# Metaphor Matching the real world pause button of tape players

#### <u>Affordance</u>

Affords grasping the circle to pull it side to side



### 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:



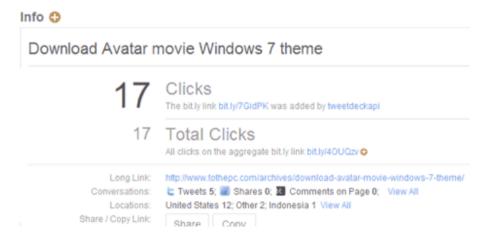
### How to see number of clicks statistics of bitly URLs

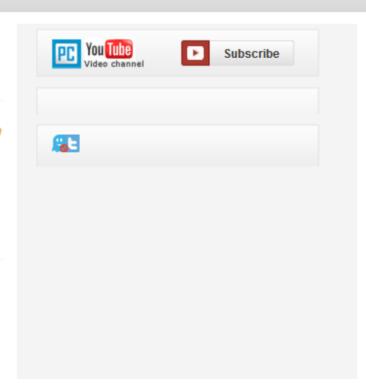
Written by Davinder Singh Kainth

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

To view stats of any bit.ly url, just add "+" sign in the end. For example, for url "http://bit.ly/7GidPK", open url "http://bit.ly/7GidPK+", this will redirect to "http://bit.ly/info/7GidPK" and show all the statistics for this shortened url.





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:

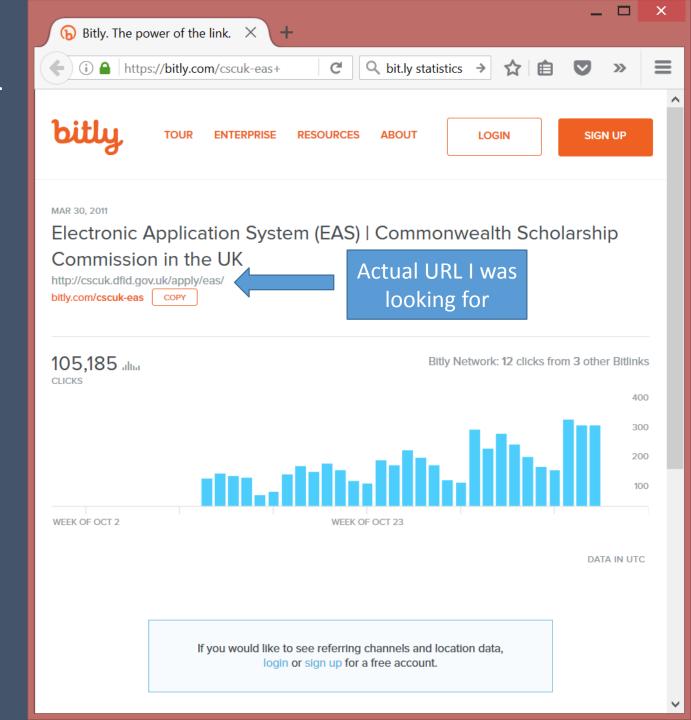


### number of clicks statistics bit.ly Street Backle He back fundorably of sturbering office, I also provide National for SML analysis. No our track number of clima. boattors, referrers, brise of close for any billy city, software become to register, bugst or need on softens. View clicks state of any Bit.ly URL To come district of any SEC y and Just will "Y" signs in the sect. For example, for an MSp. / NR Sp. TRUMW . por or "MSp. / NR Sp. TRUMW" . The off red let is a CAMANATAM TRANSPER AND THE RESERVE OF THE RESIDENCE OF THE REPORTED AT





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



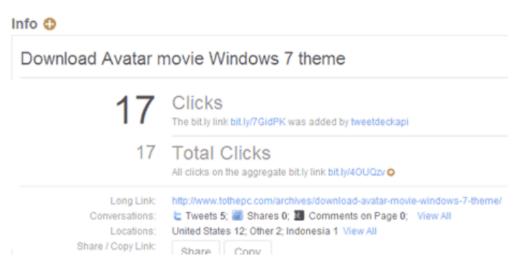
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### We don't read, we scan

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?

#### PUL7<sub>0</sub>Cc



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#### 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

#### PULYalc



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### **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?



关闭广告





好莱坞 腾讯云







网页 >

搜狗搜索

新闻 图片 军事 财经 证券 理财

热剧综艺 体育 NBA 中超

明星 电影 时尚 健康 育儿 汽车 车型 购物 房产 家居 家电 科技 数码 手机 游戏儿童星座 教育 课程 出国 文化 大家 文学

QQ

LOL CF

空间

手机管家

课堂

DNF

公益 佛学 拍客 更多

软件 ♡

体育APP

应用宝

天刀

活动促销价: ¥699

上汽大众



陷绕芒 白辉昂

PHIDEON 辉昂



网络举报APP下载 清朗网络空间 维护网民权益

自选股

征途

御龙手游 火影OL 剑侠

理财通 企鵝FM Q币 全部 💟

JD.COM 京东 JUL 好物纸价上京东

时间: 11.11日0点- 2点





活动促销价: ¥799

<del>总价¥2177</del> 3免1价:¥**1498** 

要闻

北京 6°C

习近平与两位航天员通话 将访南美并出席APBC会议 习近平将在纪念孙中山诞辰150周年大会发表讲话 习近平致电视贺特朗普当选美国总统 治国理政 李克强出访8天4国5站 3个关键词看总理亚欧行 专题 王岐山会见巴基斯坦问责局局长 张高丽在云南调研 天津爆炸案宣判: 瑞海公司董事长干学伟被判死缓 天津港爆炸案顶格重判 给受害者和社会一个交代 特朗普击败希拉里当选美总统 中方回应特朗普当选



天津港爆炸案宣判现场 11人鞠 躬谢罪

男童坠井救援进展:救援时间无法确定越挖难度越大 国家发展改革委: 鼓励煤企签中长期合同锁定价格 去年全国社保基金收入超4万亿 比上年增长14.6% 河北为治雾霾下"调度令"一般仅在救灾场合使用 吉林石化一年被罚10次仍超标排放 被民间组织起诉 马来西亚警方捣毁组织中国籍残疾人行乞团伙(图)

英国机构称中方协助巴基斯坦发展核导 外交部回应

▶ NBA-7:30视频播篮网vs尼克斯 10:00火箭vs马刺



沈阳公安帮助144名农民"讨 回"工款220万

#### 今日话题

5000个亿花了还不够,农村幼儿急需补偿教育 业主换物业要持盾牌,"恶仆欺主"不能忍 往期 我们该怎么拯救坠井的孩子 评论 孙中山追求"最理想国民党"的三次试验 历史 底线中的赚钱机会 你能看出多少? Miss Money 中国的80后作家在日本为啥没人气? 思想 旧时女星比现在的更美貌? 入流

#### 今日热播

影视剧





小糯米声音曝光! 杨幂泪目

华晨宇放大招再改神曲

综艺

- ▶ 饭局的诱惑 | 金星谈与杨丽萍恩怨 曝百花奖内墓
- ▶ 喜剧总动员 | 宋小宝跳芭蕾舞 郑恺变帅大叔
- ▶ 跨界喜剧王 | 杨树林娶何洁? 小沈阳飙歌
- ▶ 韩综 | Radio star 无限挑战 我们结婚了4
- ▶ 热播综艺 | 如果爱3 挑战不可能2 叮咯咙咚呛2
- ▶ 缘来非诚勿扰 今夜百乐门 我的新衣

#### 今日图话



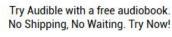


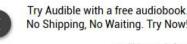


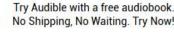
















آخر تحديث: 2016/11/3 الساعة 13:11 (مكة المكرمة)





الأخبار 🕶 الرئيسية

البغدادي

ومعركة الموصل

أبو بكر البغدادى

زعيم تنظيم الدولة

تسجيل صوتي منسوب للبغدادي

تغطيات إخبارية

الرئيس الأميركي الـ45.. من يكون؟

خبر عاجل: مراسل الجزيرة: الرئيس اللبناني يكلف رئيس تيار المستقبل سعد الحريري بتشكيل الحكومة

المواضيع المميزة الانتخابات الأميركية الحرب في سوريا الأزمة في اليمن الصراع في العراق

تعلم العربية

رياضة

أحدث الأخيار

المضوية

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البرقيات

قبل 9 دقائق

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قىل 16 دقىقة

والإثيوبيين

قبل 16 دقيقة

قيل 20 دقيقة

الاحتلال يعتقل عائلة

تركيا تلوح بإنهاء الاتفاق

مع أوروبا بشأن اللاجئين

التكنولوجيا الرقمية تعيد

الحياة للصور التذكارية

معاریف: تمییز عنصری إسرائيلى ضد العرب

بيان البرادعي المتبرئ من الانقلاب على مرسى

البث الدي

البغدادي يحرض مقاتليه

دعا أبو بكر البغدادي زعيم تنظيم الدولة

مقاتلي التنظيم لمواجهة القوات المهاجمة

للموصل، وإلى عدم الانسحاب من المعركة،

وحث البغدادي مقاتليه على مهاجمة تركيا

والسعودية، داعيا أهل السنة لدعم التنظيم.

معركة الموصل.. مآلات واحتمالات

على مهاجمة دول

البرامج 🕶 الوسائط 🕶 الموسوعة 🕶

عربي

المنطقة

قبل 4 ساعات

تغطيات إخبارية

1 Home Mail Flickr Tumblr Groups Mobile More ~ Answers

#### YAHOO!

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**Finance** 

Sports

Fantasy Football

**Politics** 

Celebrity

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Movies

Style

Beauty

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'Not my president' becomes rallying cry



Trump still has legal woes to deal with



Joy, shock, and fear after Trump's upset win



Celebs react to Donald Trump's victory

175



Celebrity

#### 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



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



Sponsored :

#### Wall Street Furious Over New Trading Algorithm

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

Ultimate4Trading



**Politics** 

#### Dems find early scapegoat in FBI Director Comey

Democratic strategists will spend years seeking answers to how they could

Sign in





2016

Election: Results





#### How much do you<sup>®</sup> need to retire?

If you have a £250,000 portfolio, download the must-read guide for retirees written by Forbes columnist and money manager Ken Fisher's firm. It's called "The 15-Minute Retirement Plan."

Click Here to Download Your Guide!

FISHER INVESTMENTS UK

2016

**Election: Latest Stories** 



Obama urges unity after Trump victory



Protests erupt over Trump's presidential win



Trump's stunning campaign rewrote all the rules. What about his presidency?

### **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

 $\bigcirc$ 

- 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

### Awesome Logo

**Books** 

Music

**Movies** 

Games

#### **Section Title**

### 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

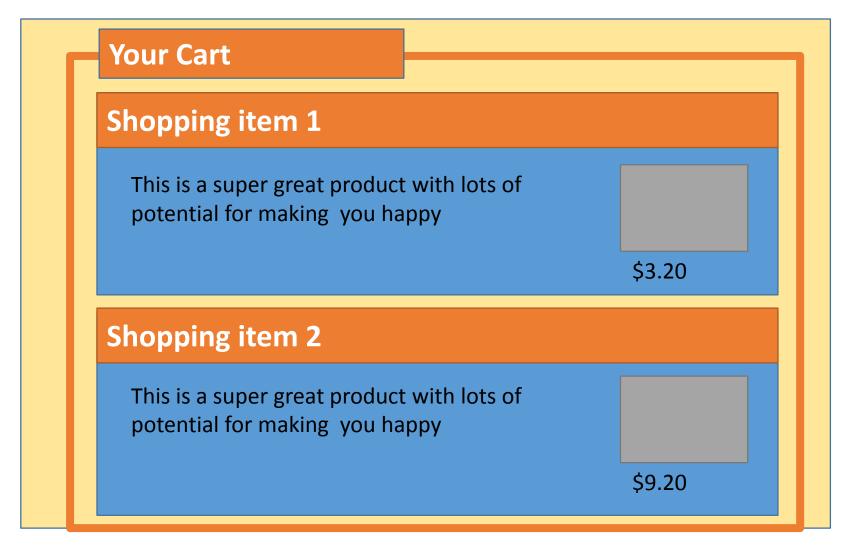
A little less important

Nowhere near as important

#### Logically related are also visually related

Books	
Music	
Movies	
Games	

### Visual nesting shows hierarchy





Terms

#### More Resources

- · View the complete Data Policy
- Interactive Tools
- Minors and Safety
- · Facebook Privacy Page
- Facebook Safety Page
- Facebook Site Governance Page
- EU-U.S. Privacy Shield Notice

## What kinds of information do we collect?

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

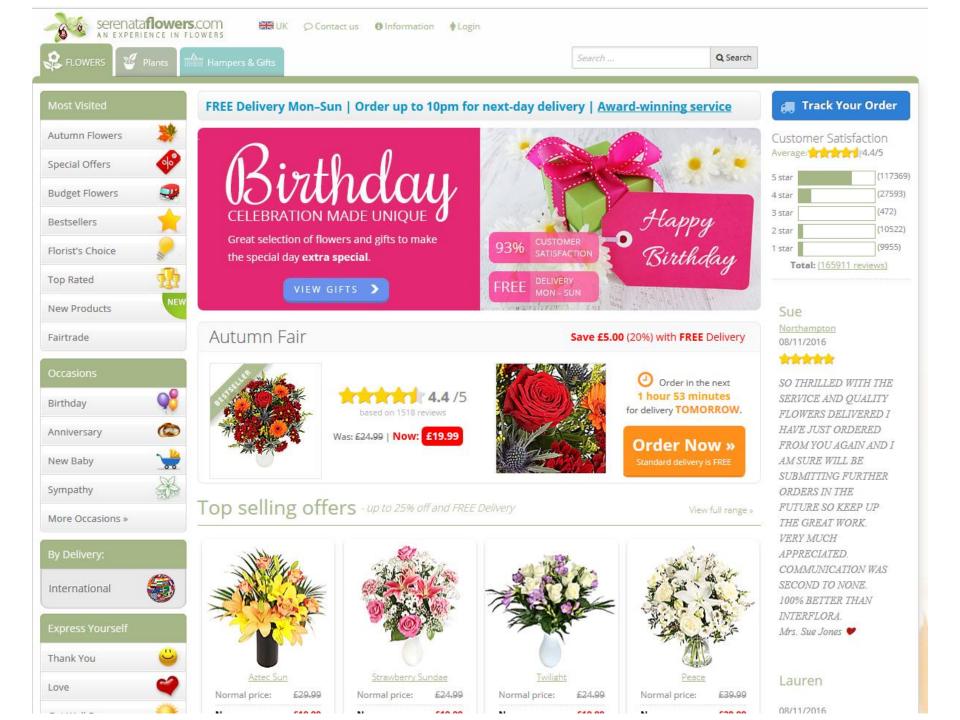
#### Things you do and information you provide.

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?**