## VISUAL DESIGN

Scott Klemmer and Michael Bernstein

## How Might We Improve This? And What Would the Objective Function be?

You are cordially invited to Robert and Alexandra's delectable after-dinner party. Wine and nibbles will be served. when: june 30th, 2012 at 9:30pm. Where: the pad. if you need directions, ping us. Kindly let us know if you'll be attending by june 1st.

## Whitespace conveys grouping

"Some space must be narrow so that other space may be wide, and some space must be emptied so that other space may be filled."

## Let's add whitespace

You are cordially invited to Robert and Alexandra's delectable after-dinner party.

Wine and nibbles will be served.

When: june 30th, 2012 at 9:30pm.

Where: the pad. if you need directions, ping us.

Kindly let us know if you'll be attending by june 1st.

## Use size contrasts to indicate hierarchy

"Information consists of differences that make a difference."

## And vary scale and weight

You are cordially invited to...

## Robert and Alexandra's delectable after-dinner party

Wine and nibbles will be served.

WHEN June 30th, 2012 at 9:30pm.

WHERE The pad. If you need directions, ping us.

Kindly let us know if you'll be attending by June 1st

## Three goals for visual design

GUIDE Convey structure, relative importance, relationships

PACE Draw people in, help orient, provide hooks to dive deep

MESSAGE Express meaning and style, breathe life into the content

## Major concepts today

- Typography
  - Point, x-height, ascenders, descenders, weight, serifs
  - Choosing fonts
- Navigation
  - Information scent
  - Visual scan paths on the web
- Grids
  - Columns, gutters, leading, alignment
- Color



## The New Hork Times

Sunday, June 10, 2012 Last Update: 9:03 PM ET



Search

ING SDIRECT

Follow Us If 🍑 |





▶ Subscribe to Home Delivery | Personalize Your Weather

WORLD U.S. POLITICS NEW YORK BUSINESS DEALBOOK TECHNOLOGY SPORTS SCIENCE HEALTH ARTS STYLE

OPINION

Autos Blogs Books Cartoons Classifieds Crosswords Dining & Wine Education Event Guide Fashion & Style Home & Garden Jobs Magazine

## Allies Restrict Airstrikes on Taliban in **Civilian Homes**

By ERIC SCHMITT 7:17 PM ET Attacks on militants who hide in private dwellings, including a NATO strike that Afghan officials say killed 18 civilians, have increased tensions with the United States.

Post a Comment | Read (12)

## Spain's Premier Steps Up in Debt Crisis, With Caveats

By RAPHAEL MINDER 7:32 PM ET Central to any solution to the European debt crisis will be the role played by Prime Minister Mariano Rajoy of Spain, although he is known for playing both sides of an issue.

 Turmoil in Greece Drives Urgency of a Spanish Rescue

## Tony Awards



10 11 12 >

A performance by the cast of "Follies."

## Live Updates on the Tony Awards

The Times theater critic Charles Isherwood and reporter Dave Itzkoff are writing about the awards ceremony.

Slide Show: Red Carpet

LATEST UPDATES

## Sunday Review

### OPINION America's New Energy Reality

By DANIEL YERGIN

The United States is now a more significant energy producer than it was the last time we elected a president.

NEWS ANALYSIS

Health Care After the Supreme Court Ruling

By PAM BELLUCK

Will the decision make any real difference?

Bruni: G.O.P. and Gays

Douthat: Eugenics

Dowd: Poppy Chic

Friedman: Egypt Politics

Kristof: From Peace Prize to Paralysis

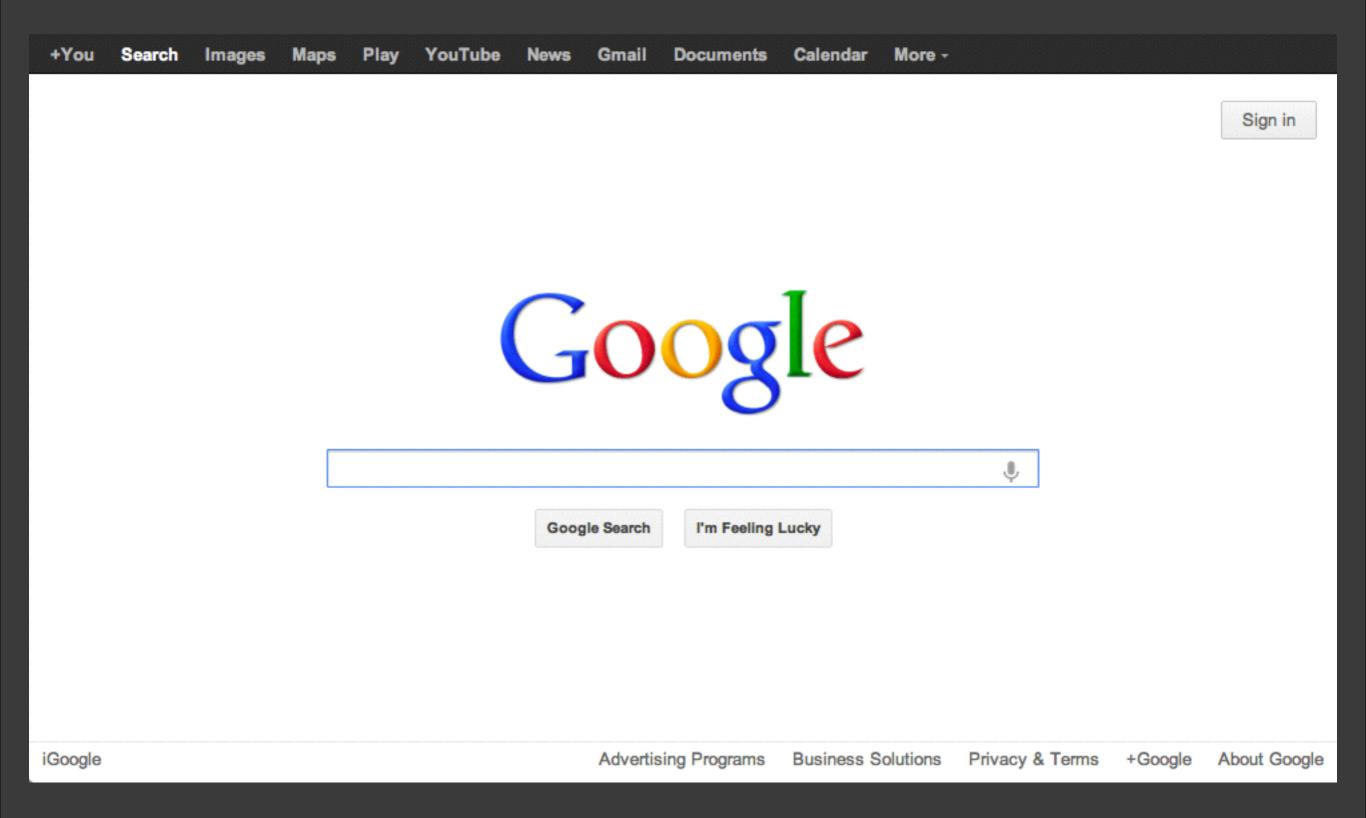
Editorial: Deny the Cash

### BUSINESS DAY »

### FAIR GAME How Banks Could Return the Favor

Governments are stuck in Wall Street deals with high interest rates, Gretchen Morgenson writes. Why not save them some money?

Get there fast. Get there first.



## craigslist

post to classifieds my account

### search craigslist

÷ > for sale

### event calendar

S	M	Т	W	Т	F	S
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

help, faq, abuse, legal avoid scams & fraud personal safety tips terms of use new system status

about craigslist craigslist is hiring craigslist blog best-of-craigslist craigslist TV craig connects progressive directory weather quake tide

## SF bay area w sfc sby

eby

pen nby

SCZ

## community

lost+found activities musicians artists childcare local news politics general rideshare groups volunteers pets classes events

### personals

strictly platonic women seek women women seeking men men seeking women men seeking men misc romance casual encounters missed connections rants and raves

### discussion forums

1099	gifts	pets
apple	haiku	philos
arts	health	politic
atheist	help	psych
autos	history	queer
beauty	housing	recover
bikes	jobs	religion
celebs	jokes	rofo
comp	kink	science
crafts	l.t.r.	shop
diet	legal	spirit
divorce	linux	sports
dying	loc pol	t.v.
eco	m4m	tax

## housing

apts / housing rooms / shared sublets / temporary housing wanted housing swap vacation rentals parking / storage office / commercial real estate for sale

### for sale

appliances arts+crafts antiques auto parts baby+kids barter bikes beauty+hlth boats cars+trucks books cds/dvd/vhs cell phones business computer clothes+acc collectibles free furniture electronics general farm+garden garage sale jewelry household materials motorcycles rvs music instr sporting tickets photo+video tools toys+games wanted video gaming

## services

beauty automotive creative farm+garden

## iobs

accounting+finance

admin / office arch / engineering art / media / design biotech / science business / mgmt customer service education food / bev / hosp general labor government human resources internet engineers legal / paralegal manufacturing marketing / pr / ad medical / health nonprofit sector real estate retail / wholesale sales / biz dev salon / spa / fitness security skilled trade / craft software / qa / dba systems / network technical support transport tv / film / video web / info design writing / editing [ETC] [ part-time ]

### nearby cl

bakersfield chico fresno gold country hanford humboldt inland empire klamath falls las vegas los angeles medford mendocino co merced modesto monterey orange co redding reno roseburg sacramento san luis obispo santa barbara santa maria sf bay area siskiyou co stockton susanville ventura visalia-tulare yuba-sutter

us cities

us states

canada

cl worldwide



HONORING THE BEST OF THE WEB

About

Quick Facts

Team

Enter Now

Winners Press

Resource Center & Store

Sponsors & Partners

Search

Follow us













Go behind the scenes on our blog



Watch our YouTube Channel



See all our images on Flickr

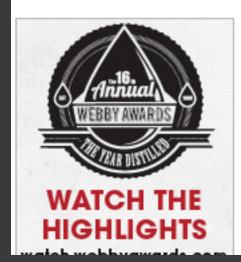
Subscribe

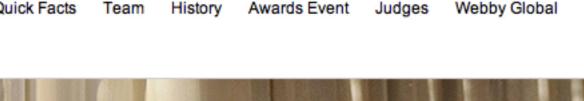


Subscribe to The Webbys' monthly newsletter, the 011.



Get Netted, our daily email dedicated to better living through the Internet.





Awards Event



## 16TH ANNUAL WEBBY SPECIAL ACHIEVEMENT AWARD WINNERS

## About Webby Special Achievement Awards

The Webby Special Achievement Awards Honorees were presented by The Academy at the 16th Annual Webby Awards Celebration during the live online broadcast of the Show on May 21, 2012. See their 5-Word Speeches at webbyawards.com



Webby Lifetime Achievement

### MAYOR MICHAEL BLOOMBERG

The Webby Awards is proud to present Mayor Michael Bloomberg with a Webby Award for Lifetime Achievement.





## The New Hork Times

Sunday, June 10, 2012 Last Update: 9:03 PM ET



Search

ING SDIRECT

Follow Us If 🍑 |





▶ Subscribe to Home Delivery | Personalize Your Weather

WORLD U.S. POLITICS NEW YORK BUSINESS DEALBOOK TECHNOLOGY SPORTS SCIENCE HEALTH ARTS STYLE

OPINION

Autos Blogs Books Cartoons Classifieds Crosswords Dining & Wine Education Event Guide Fashion & Style Home & Garden Jobs Magazine

## Allies Restrict Airstrikes on Taliban in **Civilian Homes**

By ERIC SCHMITT 7:17 PM ET Attacks on militants who hide in private dwellings, including a NATO strike that Afghan officials say killed 18 civilians, have increased tensions with the United States.

Post a Comment | Read (12)

## Spain's Premier Steps Up in Debt Crisis, With Caveats

By RAPHAEL MINDER 7:32 PM ET Central to any solution to the European debt crisis will be the role played by Prime Minister Mariano Rajoy of Spain, although he is known for playing both sides of an issue.

 Turmoil in Greece Drives Urgency of a Spanish Rescue

## Tony Awards



10 11 12 >

A performance by the cast of "Follies."

## Live Updates on the Tony Awards

The Times theater critic Charles Isherwood and reporter Dave Itzkoff are writing about the awards ceremony.

- Slide Show: Red Carpet
- LATEST UPDATES

## Sunday Review

### OPINION America's New Energy Reality

By DANIEL YERGIN

The United States is now a more significant energy producer than it was the last time we elected a president.

NEWS ANALYSIS

### Health Care After the Supreme Court Ruling

By PAM BELLUCK

Will the decision make any real difference?

Bruni: G.O.P. and Gays

Douthat: Eugenics

Dowd: Poppy Chic

Friedman: Egypt Politics

Kristof: From Peace Prize to Paralysis

Editorial: Deny the Cash

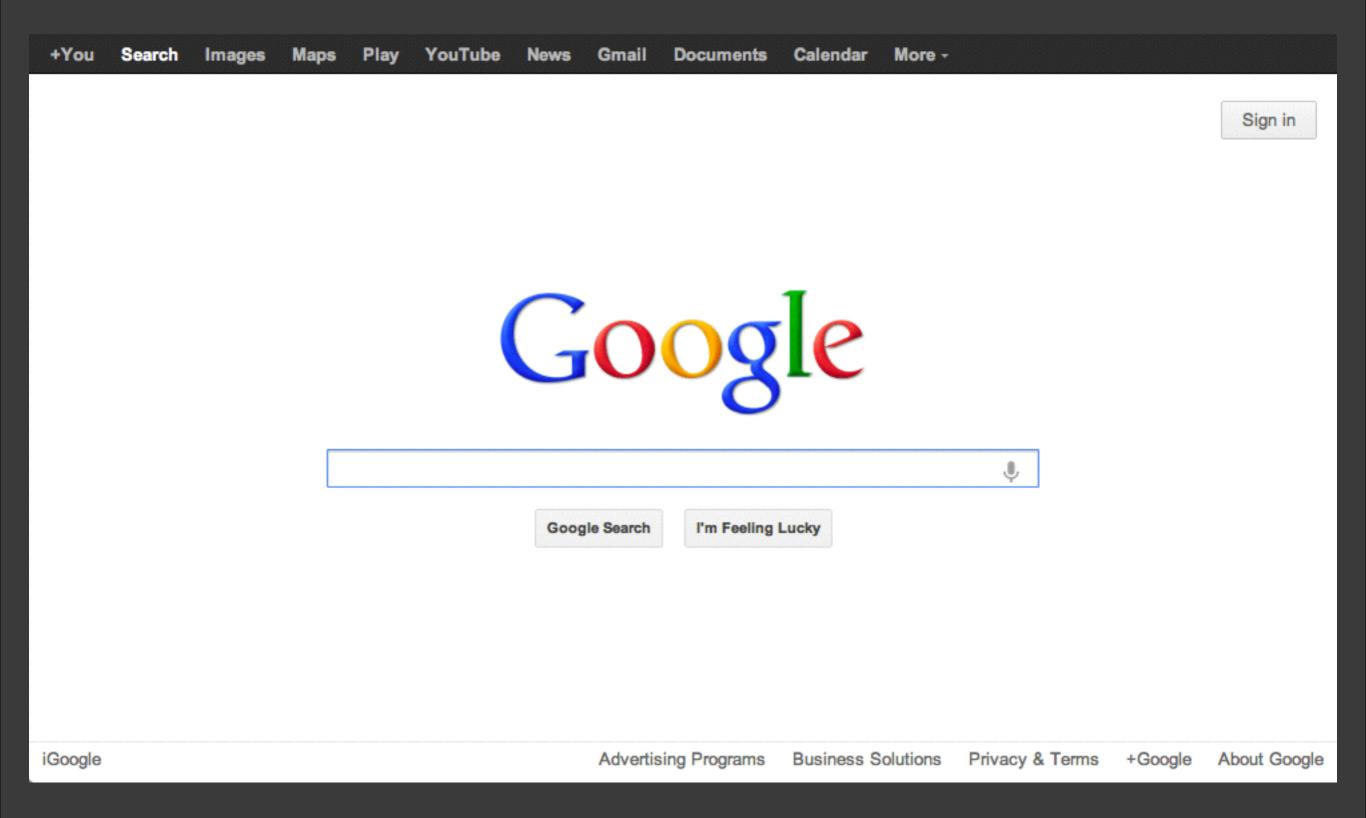
### BUSINESS DAY »

### FAIR GAME How Banks Could Return the Favor

Governments are stuck in Wall Street deals with high interest rates, Gretchen Morgenson writes. Why not save them some money?







## The Original Google Computer Storage



## cranguline

SECTION SECTION

, commercial companies.

STATE SERVICES

MF bay area \* . . . . . . . . . .

-

## craigslist

post to classifieds my account

### search craigslist

÷ > for sale

### event calendar

S	M	Т	W	Т	F	S
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

help, faq, abuse, legal avoid scams & fraud personal safety tips terms of use new system status

about craigslist craigslist is hiring craigslist blog best-of-craigslist craigslist TV craig connects progressive directory weather quake tide

## SF bay area w sfc sby eby

pen nby

SCZ

## community

lost+found activities musicians artists childcare local news politics general rideshare groups volunteers pets classes events

### personals

strictly platonic women seek women women seeking men men seeking women men seeking men misc romance casual encounters missed connections rants and raves

### discussion forums

1099	gifts	pets
apple	haiku	philos
arts	health	politic
atheist	help	psych
autos	history	queer
beauty	housing	recover
bikes	jobs	religion
celebs	jokes	rofo
comp	kink	science
crafts	l.t.r.	shop
diet	legal	spirit
divorce	linux	sports
dying	loc pol	t.v.
eco	m4m	tax

## housing

apts / housing rooms / shared sublets / temporary housing wanted housing swap vacation rentals parking / storage office / commercial real estate for sale

### for sale

appliances arts+crafts antiques auto parts baby+kids barter bikes beauty+hlth boats cars+trucks books cds/dvd/vhs business cell phones clothes+acc computer collectibles free furniture electronics farm+garden general garage sale jewelry household materials motorcycles rvs music instr sporting tickets photo+video tools toys+games wanted video gaming

### services

automotive beauty creative farm+garden

## jobs

accounting+finance

admin / office arch / engineering art / media / design biotech / science business / mgmt customer service education food / bev / hosp general labor government human resources internet engineers legal / paralegal manufacturing marketing / pr / ad medical / health nonprofit sector real estate retail / wholesale sales / biz dev salon / spa / fitness security skilled trade / craft software / qa / dba systems / network technical support transport tv / film / video web / info design writing / editing [ETC] [ part-time ]

### nearby cl

bakersfield chico fresno gold country hanford humboldt inland empire klamath falls las vegas los angeles medford mendocino co merced modesto monterey orange co redding reno roseburg sacramento san luis obispo santa barbara santa maria sf bay area siskiyou co stockton susanville ventura visalia-tulare vuba-sutter

us cities

us states

canada

cl worldwide



The Webby Awards, www.webbyawards.com



HONORING THE BEST OF THE WEB

About

Enter Now

Winners

Resource Center & Store

Sponsors & Partners

Search

Follow us













Go behind the scenes on our blog



Watch our YouTube Channel



See all our images on Flickr

Subscribe



Subscribe to The Webbys' monthly newsletter, the 011.



Get Netted, our daily email dedicated to better living through the Internet.



Quick Facts Team History Awards Event Judges Webby Global



Press

## 16TH ANNUAL WEBBY SPECIAL ACHIEVEMENT AWARD WINNERS

## About Webby Special Achievement Awards

The Webby Special Achievement Awards Honorees were presented by The Academy at the 16th Annual Webby Awards Celebration during the live online broadcast of the Show on May 21, 2012. See their 5-Word Speeches at webbyawards.com



Webby Lifetime Achievement

## MAYOR MICHAEL BLOOMBERG

The Webby Awards is proud to present Mayor Michael Bloomberg with a Webby Award for Lifetime Achievement.

## Three basic tools of visual design

- Typography
- Layout
- Color

# Typography



Gill Sans, designed by Eric Gill and released by the Monotype Corporation in 1928

## Six Typographic Terms

## S Point size

## S

Gill Sans Calibri

S Leading
S Dographic lens

## Six x-height

Typefaces with high x-height: easier to read at small point size

Typefaces with low x-height: harder to read at small point size

ascenders

## Six Typographic Terms

descenders

## Six Typographic Terms

light regular bold

weight

## Six Typographic Terms

# serifs Minion Pro

# SMALL CAPS, LOWERCASE NUMBERS: 1234567890

## Neutraface

ENJOY CS147 ENJOY CS147

## The Serif Hypothesis

• Serif typefaces are easier to read -- and thereby preferable for long stretches of text -- because the serifs provide anchors that guide the reader's eye. Sans serif fonts lack these anchors and are therefore inappropriate for long stretches of text.

## No Robust Evidence for Serif Hypothesis

"What initially seemed a neat dichotomous question of serif versus sans serif has resulted in a body of research consisting of weak claims and counter-claims, and study after study with findings of 'no difference'. Is it the case that more than one hundred years of research has been marred by repeated methodological flaws, or are serifs simply a typographical 'red herring'?"

"Legibility, in practice, amounts simply to what one is accustomed to" — Eric Gill, 1931

As quickly as you can:

## Name this color.

## Name this color.

## Green

## Red

## Blue

## Purple

## Blue

## Purple

## Blue

## Purple

## Red

## Green

## Purple

#### The role of expectation

- Stroop effect: conflicting signals take longer to parse
- So, be aware of the signal that your choice is sending



#### Typefaces, like everything, build reputations

Baskerville

The Literary
Magazine for
Gifted Kids &
Their Families



AFTER SHAVE BALM BAUME APRES RASAGE

#### Try these two things

- Use the typeface in multiple places to see its range
- Display the same text with different typefaces to change its effect

## Layout

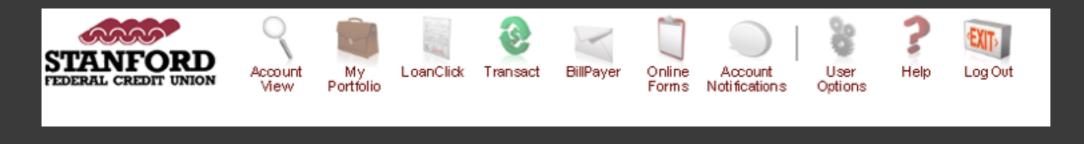
#### Information Scent

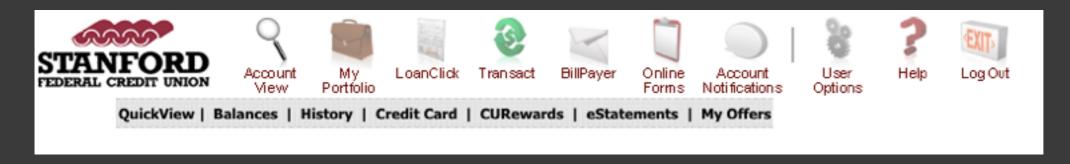
- Can people figure out how to get to the information they want?
- Do they realize what options are available?

#### How can you detect poor scent?

- Flailing
- Low confidence
- Back button

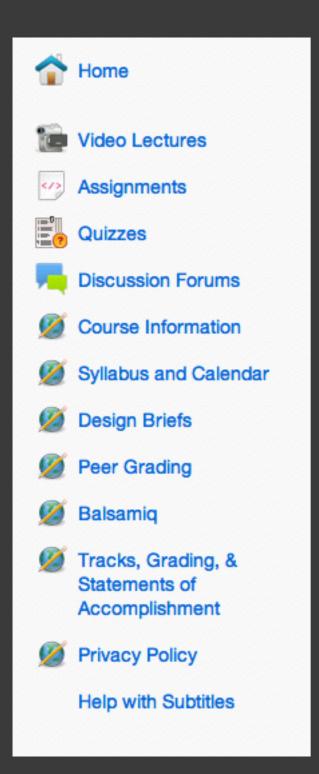
#### Low-Scent Navigation





- Surprising categories
- Short links
- Hidden navigation
- Icons provide little additional information

#### Generic Icons Rarely Help



#### Icons help when...

- they facilitate repeat recognition
- when you know what something looks like but not what it's called
- Good redundant coding can help

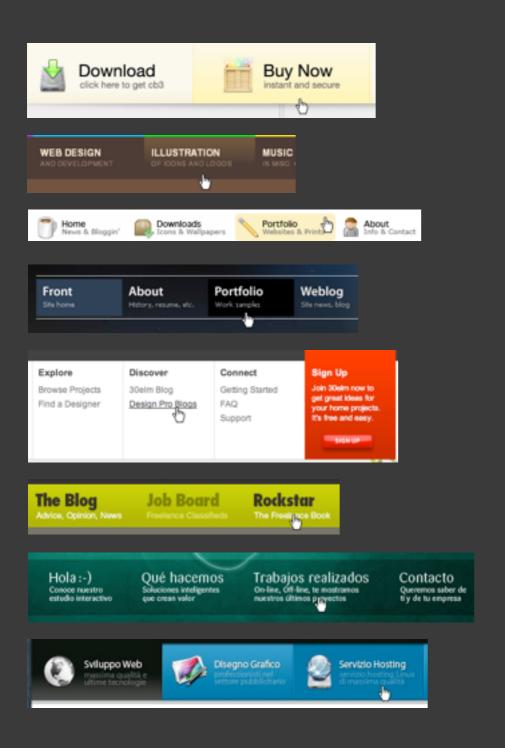
#### Improving scent: multi-word links

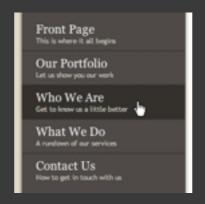
- With specific, recognizable terms
- Trigger words, not "clever" terms
- This also helps accessibility
  - Course Information
  - Syllabus and Calendar
  - Design Briefs
  - Peer Grading
  - Balsamiq
  - Tracks, Grading, & Statements of Accomplishment

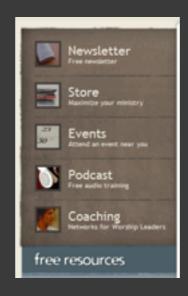
es, abilities, values, and situation. In thing ne. You can find the video here. Go through al, and brainstorm ideas for how you we least 20 different ideas. Ask a couple of

es, abilities, values, and situation. In this as ne. Here is the video of waiting in line. Go nd material, and brainstorm ideas for how y with at least 20 different ideas. Ask a coup

#### Improving scent: Speaking Block Navigation





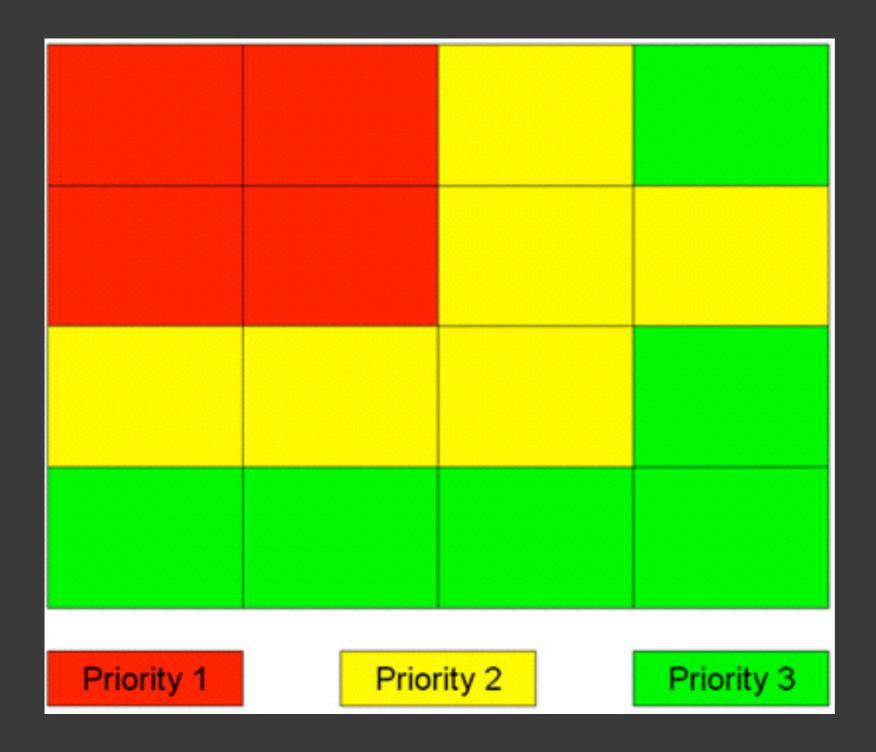


#### Does location matter?

#### Eyetracking



#### Design for glanceability



#### Prime Real Estate

- Above the fold
- Where people expect
  - Where other pages put similar content
  - Not where ads usually

# People are more than happy to scroll if they think they'll be rewarded

### How People Read Online

# "They Don't"

## Interlaced Browsing

#### Measuring the Effect of Writing Strategy

**Improvement** 

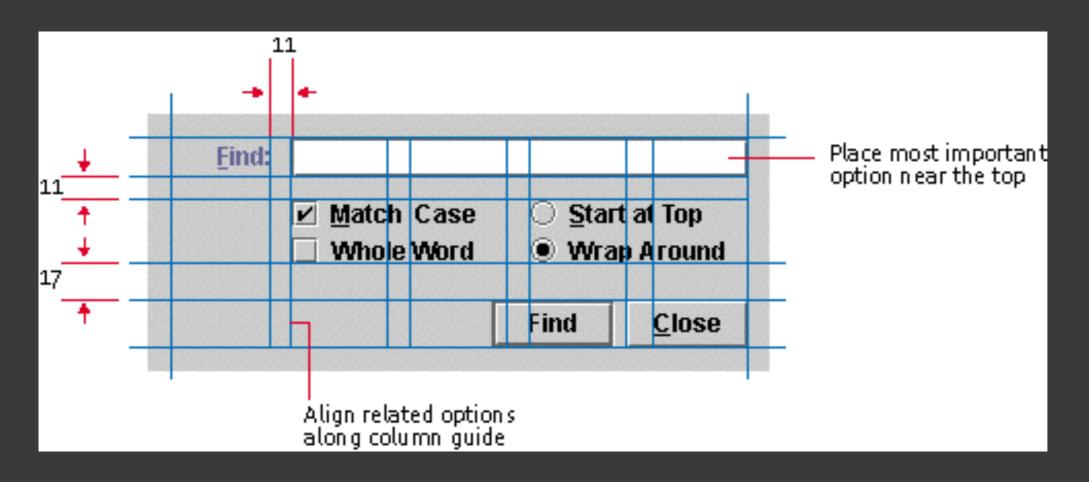
Site version		impi ovemen
Promotional writing (control condition) using the "marketese" found on many commercial websites	Nebraska is filled with internationally recognized attractions that draw large crowds of people every year, without fail. In 1996, some of the most popular places were Fort Robinson State Park (355,000 visitors), Scotts Bluff National Monument (132,166), Arbor Lodge State Historical Park & Museum (100,000), Carhenge (86,598), Stuhr Museum of the Prairie Pioneer (60,002), and Buffalo Bill Ranch State Historical Park (28,446).	0% (by definition)
Concise text with about half the word count as the control condition	In 1996, six of the best-attended attractions in Nebraska were Fort Robinson State Park, Scotts Bluff National Monument, Arbor Lodge State Historical Park & Museum, Carhenge, Stuhr Museum of the Prairie Pioneer, and Buffalo Bill Ranch State Historical Park.	58%
Scannable layout using the same text as the control condition in a layout that facilitated scanning	Nebraska is filled with internationally recognized attractions that draw large crowds of people every year, without fail. In 1996, some of the most popular places were:  • Fort Robinson State Park (355,000 visitors) • Scotts Bluff National Monument (132,166) • Arbor Lodge State Historical Park & Museum (100,000) • Carhenge (86,598) • Stuhr Museum of the Prairie Pioneer (60,002) • Buffalo Bill Ranch State Historical Park (28,446).	47%
Objective language using neutral rather than subjective, boastful, or exaggerated language (otherwise the same as the control condition)	Nebraska has several attractions. In 1996, some of the most-visited places were Fort Robinson State Park (355,000 visitors), Scotts Bluff National Monument (132,166), Arbor Lodge State Historical Park & Museum (100,000), Carhenge (86,598), Stuhr Museum of the Prairie Pioneer (60,002), and Buffalo Bill Ranch State Historical Park (28,446).	27%
Combined version using all three improvements in writing style together: concise, scannable, and objective	In 1996, six of the most-visited places in Nebraska were:  • Fort Robinson State Park • Scotts Bluff National Monument • Arbor Lodge State Historical Park & Museum • Carhenge • Stuhr Museum of the Prairie Pioneer • Buffalo Bill Ranch State Historical Park	124%

Sample Paragraph

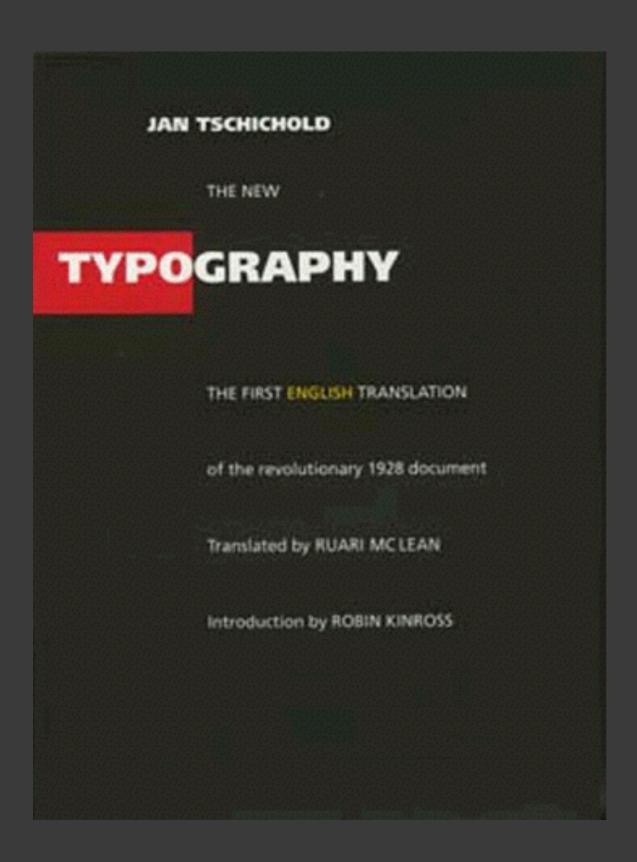
Site Version

## Grids

#### Grid Systems (Java L&F, 2001)



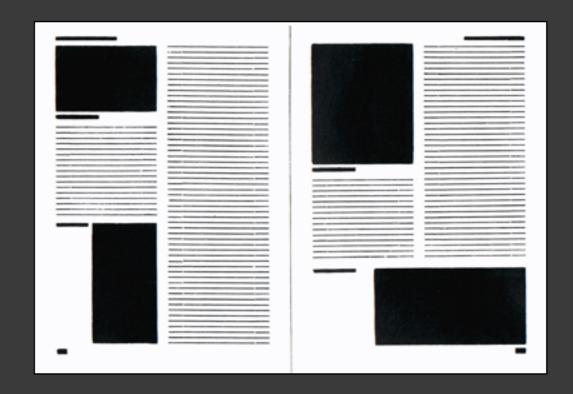
#### Jan Tschichold's Bauhaus Revolution



#### Asymmetric Typography



How blocks used to be arranged in magazines. Schematic, thoughtless centering of blocks (= ugly).



The same blocks, correctly arranged in the same typearea. Constructive, meaningful, and economical (= beautiful).

# Grids comprise...

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

# **Lorem Ipsum!**

dolor sit amet

Consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Lorem
Ipsum
Dolor
Sit Amet
Consectetur

# Lorem ipsum dolor sit amet

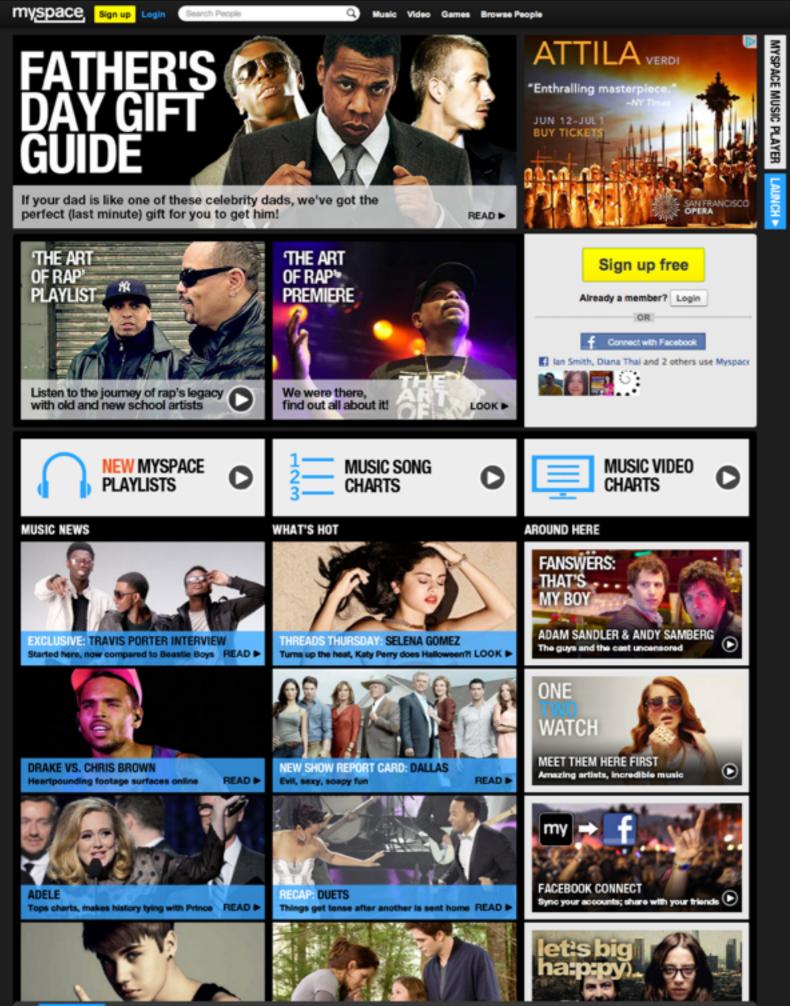
Consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

# Lorem ipsum dolor sit amet

Consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

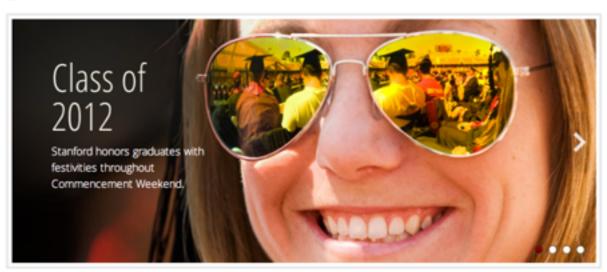
# Lorem ipsum dolor sit amet

Consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.



About Stanford Admission Academics Research Life On Campus

Show Expanded Menus



EVENTS



14

MFA Documentary Film Screening 7:30 p.m.

[36]

15

Robert Huw Morgan, organ 8 p.m.

16

Stanford Design Program - Final Presentations 1:30 p.m.

EVENT CALENDAR »

SPORTS



GOSTANFORD.COM »

#### UNIVERSITY NEWS



Economics of the sun Stanford professor delves into the prospects for costcompetitive solar power.



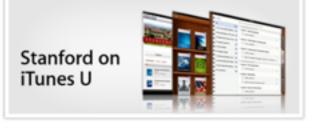
Dissecting a classic Students explore product design through restoration of a '62 Cadillac DeVille.

#### MORE STORIES

- » In countries where cooking can kill, trying to promote safer stoves
- » Stanford researchers help visualize California's changing delta
- » Taking the sting out of summer: Advice from Stanford wilderness medicine experts

MORE NEWS >

#### AT STANFORD



Now featuring full courses on the new iTunes U app.

SEE ALL >

#### GATEWAYS FOR ...



- » Faculty & Staff
- » Alumni
- » Parents
- > Visitors
- » Neighbors

#### TOP DESTINATIONS



#### SCHOOLS & DEPARTMENTS

- » Business
- » Earth Sciences
- » Education
- » Engineering
- » Humanities & Sciences
- » Law
- » Medicine
- » Departments (A Z)
- » Interdisciplinary Programs

## HOSPITALS

- » Stanford Hospital & Clinics
- » Lucile Packard Children's

# LIBRARIES

» Stanford University Libraries

#### RESEARCH

- » Independent Labs
- » Research Centers

## SLIDESHOW



Stanford in Pictures

## STAY CONNECTED











WORLD U.S. POLITICS NEW YORK BUSINESS DEALBOOK SPORTS SCIENCE HEALTH ARTS STYLE

TECHNOLOGY OPINION Autos

Biogs Books Cartoons Classifieds Crosswords Dining & Wine Education Event Guide Fashion & Style Home & Garden

Jobs Magazine Movies Music Obituaries Real Estate Sunday Review T Magazine Television Theater Travel Weddings / Celebrations

#### MULTIMEDIA

Interactives Photography Podcasts Video

#### TOOLS & MORE

Alorts Beta 620 Corrections Mobile Movie Tickets Learning Network NYT Events NYT Store Public Editor Theater Tickets Times Machine TimesLimited Times Skimmer Times Topics Times Wire

SUBSCRIPTIONS Home Delivery Digital Subscriptions Gift Subscriptions Corporate

# Court Dissolves Parliament in Egypt in Blow to Islamists

By DAVID D. KIRKPATRICK 5 minutes ago

Egypt's high court, which also blessed the presidential bid of Hosni Mubarak's last prime minister Thursday, appeared to be engaged in a frontal legal assault on the Muslim Brotherhood.

- Post a Comment | Read (189)
- · The Lede: Reaction in Egypt 5:37 PM ET

## With Justices Set to Rule on Health Law, 2 Parties Strategize

By JONATHAN WEISMAN and MICHAEL D. SHEAR

If the measure is not thrown out, House Republicans plan to force a repeal vote, while top officials at the White House are projecting confidence that the justices will rule in their favor.

 K Interactive: How the Supreme Court Could Rule

#### U.N. Monitors Find Vast Devastation in Syrian Village

By RICK GLADSTONE 3:16 PM ET Stores were looted and homes abandoned in Al Heffa,

besieged for days by Syrian forces, and the

smell of death hung in the air, said United Nations monitors. Syrian Liberators, Bearing Toy

# Guns 5:45 PM ET

#### MORE NEWS Jury Sides With Costner

in BP Spill Lawsuit 18 minutes ago

Mets Sweep the Rays 6:42 PM ET

CAMPAIGN 2012





# Candidates Go Head to Head on Economy

By HELENE COOPER and MICHAEL BARBARO 57 minutes ago President Obama acknowledged that the election would turn on the divergence between him and Mitt Romney, who was also in Ohio, on how to achieve economic revival.

- Post a Comment | Read (203)
- Romney Says Obama's Actions Don't Match Words

## Tests Put Cave Art in the Age of Neanderthals

By JOHN NOBLE WILFORD

Paintings on cave walls in Spain are far older than previously thought - some of them more than 40,000 years old, scientists said.



## Merkel Stresses Limits to Germany's Strength

By NICHOLAS KULISH and PAUL GEITNER 46 minutes ago Chancellor Angela Merkel told German lawmakers the country cannot prop up the faltering euro zone.

- Switzerland and Britain Gird Against the Storm 8:05 PM ET
- Norris: Conspiracy Theories Fly | M Graphic: The Crisis Now

#### At U.S. Airports, a Building Boom Takes Hold By JAD MOUAWAD

The nation's biggest airports are in the midst of major renovations or expansions that, taken together, amount to some of the largest infrastructure projects in America.



## Stanford Gets 110 Years in 87 Billion Ponzi Case By CLIFFORD KRAUSS 7:36 PM ET

A federal jury had convicted R. Allen Stanford of 13 out of 14 counts of fraud in connection with a global scheme.

## ON THE BLOGS

- On Par: Live Blog on the U.S. Open
- · Bits: Apps I Want to Go Away

## VIDEO »

More Video | Multimedia »



Ready for Battle

Armstrong Seems to

Tour de France winner, said he was "exploring

all my options" in dealing with new charges brought by the United States Anti-Doping Agency.

# Sunday Review

WILLIAM J. BROAD News Analysis: Iran's High Card at the Nuclear Negotiation Table

Iran has increased uranium enrichment and is now producing a form close to bomb grade.

#### OPINION »

- · Kristof: Hugs From Iran | Persian Translation
- Editorial: Jamie Dimon
- · Greenhouse: Proxy War?
- · Townies: Russian Heart
- · Op-Ed: How Drones Help Al Qaeda
- · Taking Note: Gingrich

MARKETS » At 9:05 PM ET CHINA Nikkei HangSeng Shanghai 8,570.65 18,808.40 2,295.95 -218.12+1.76 +0.00 +0.02% -1.15% +0.00% Data delayed at least 15 minute

Get there fast. Get there first.



# My Portfolios » Stock, ETFs, Funds



P&G is ready for real business. Are you?

Ready For Real Business XEFOX 💽



#### MOVIES »

#### Heroes, Villains and the Invisible

A look at the offerings in the 2012 Human Rights Watch Film Festival.



#### Cheap Perfume Tom Cruise stars in "Rock of Ages.

A Smell of Wine and

#### A Solitary Retreat "Your Sister's Sister" is Lynn

Shelton's new comedy. - Interview: Lynn Shelton Scriptiess in Seattle

# IN SELECT THEATERS JUNE 15

REAL ESTATE AUTOS JOBS ALL CLASSIFIEDS

#### House Hunting in ... Italy

It's a buyers' market in Italy, where house prices have steadily declined since 2010.

In Side Show

# FIND PROPERTIES

Go to Real Estate Section

Search for Properties

- Download the Real Estate
- Commercial Real Estate
- Video Showcase: Real Estate
- Post an Ad



845 West End Avenue Expansive Pre-War Condo Living from \$1,995 M

WORLD U.S. POLITICS NEW YORK BUSINESS DEALBOOK TECHNOLOGY SPORTS SCIENCE HEALTH ARTS STYLE

OPINION

Autos

Blogs Books Cartoons Classifieds Crosswords Dining & Wine Education Event Guide Fashion & Style Home & Garden Jobs Magazine Movies Music Obituaries Real Estate Sunday Review T Magazine Television Theater

#### MULTIMEDIA

Weddings /

Celebrations

Travel

Interactives Photography Podcasts Video

#### TOOLS & MORE

Alerte Beta 620 Corrections Mobile Movie Tickets Learning Network NYT Events NYT Store Public Editor Theater Tickets Times Machine

TimesLimited

Times Skimmer

Times Topics

Times Wre

Gift. Subscriptions

Corporate

# SUBSCRIPTIONS Home Delivery Digital Subscriptions

ING lbi DIRECT

Thursday, June 1

Candidates Go Head | Head on Economy

President Obama acknowledged that the election would turn on

the divergence between him an Mitt Romney, who was also in

Romney Says Obama's Actions Don't Match Words

Tests Put Cave Art in the Age of Neanderthals

Merkel Stresses Limits to Cormany's Strength

By NICHOLAS KULISH and PAUL CHITNER 46 minutes ago

Switzerland and Britain Gird Against the Storm 8:05 PM ET

At U.S. Airports, a Building Boom Takes Hold

The nation's biggest airports are in the midst of

major renovations or expansion that, taken

together, amount to some of the argest

infrastructure projects in Ameria.

Norris: Conspiracy Theories Fly Graphic: The Crisis Now

Chancellor Angela Merkel told ( rman lawmakers the country

Paintings on cave walls in Spair are far older

than previously thought - some of them more

than 40,000 years old, scientist said.

cannot prop up the faltering eus zone.

y HELENE COOPER and MICHAE

Post a Comment | Read (203)

By JOHN NOBLE WILFORD

Ohio, on how to achieve econonic revival.



BARBARO 57 minutes ago

. 2012 Last Update: 9:09 PM ET





# Subscribe to Home Delivery | Personalize Your Weather

WILLIAM J. BROAD News Analysis: Iran's High Card at the Nuclear Negotiation Table

Sunday Review

Iran has increased uranium enrichment and is now producing a form close to omb grade.

# OPINION »

Kristof: Hugs From Iran | Persian Translation

Editorial: Jamie Dimon

Greenhouse: Proxy War?

Townies: Russian Heart Op-Ed: How Drones Help Al Qaeda

Taking Note: Gingrich

MARKETS »

At 9:05 PM E CHINA Nikkei HangSeng Shangha 8,570.65 18,808.40 2,295.95 -218.12 +1.76 +0.00

+0.02% -1.15% +0.00% Data delayed at least 15 minutes

GET QUOTES My Portfolios x Stock, ETFs, Funds Go



P&G is ready for real Are you?



Ready For Ri



# MOVIES »

Heroes, Villains and the Invisible

A look at the offerings in the 2012 Human Rights Watch Film Festival.



A Solitary Retreat "Your Sister's Sister" is Lynn Shelton's new comedy.

Interview: Lynn Shelton

Scriptiess in Seattle

## A Smell of Wine and Cheap Perfume

Iom Cruise tars in "Rock of Ages.

₫a Slide Show



IN SELECT THEATERS JUNE 15

#### REAL ESTATE AUTOS JOBS

House Hunting in ... Italy

It's a buyers' market in Italy, where house prices have steadily declined since 2010.

It Slide Show

## ALL CLASSIFIEDS FIND PROPERTIES

## · Go to Real Estate Section

- Search for Properties
- Download the Real Estate
- Commercial Real Estate
- Video Showcase: Real Estate
- Post an Ad

845 West End Avenue Expansive Pre-War Condo Living from \$1.995 M



# Court Dissolves Marian Campign 2012 Parliament in Egypt in Blow

to Islamists By DAVID D. KIRKPATRICK

5 minutes ago Egypt's high court, which also

blessed the presidential bid of Hosni Mubarak's last prime minister Thursday, appeared to be engaged in a frontal legal assault on the Muslim Brotherhood.

Post a Comment | Read (189)

The Lede: Reaction in Egypt 5:37 PM ET

# With Justices Set to Rule on Health Law. 2 Parties Strategize

By JONATHAN WEISMAN and MICHAEL D. SHEAR

If the measure is not thrown out, House Republicans plan to force a repeal vote, while top officials at the White House are projecting confidence that the justices will rule in their favor.

 K. Interactive: How the Supreme Court Could Rule

## U.N. Monitors Find Vast Devastation in Syrian Village

By RICK GLADSTONE 3:16 PM ET Stores were looted and homes Al Heffa.

abandoned in besieged for

days by Syrian forces, and the smell of death hung in the air, said United Nations monitors.

Syrian Liberators, Bearing Toy Guns 5:45 PM ET

# MORE NEWS

Jury Sides With Costner in BP Spill Lawsuit 18 minutes ago

Mets Sweep the Rays 6:42 PM ET

VIDEO »

# Stanford Gets 110 Years in 7 Billion Ponzi Case

By CLIFFORD KRAUSS 7:36 PM E A federal jury had convicted R. len Stanford of 13 out of 14

DAWADOM CALVE

counts of fraud in connection with a global scheme.



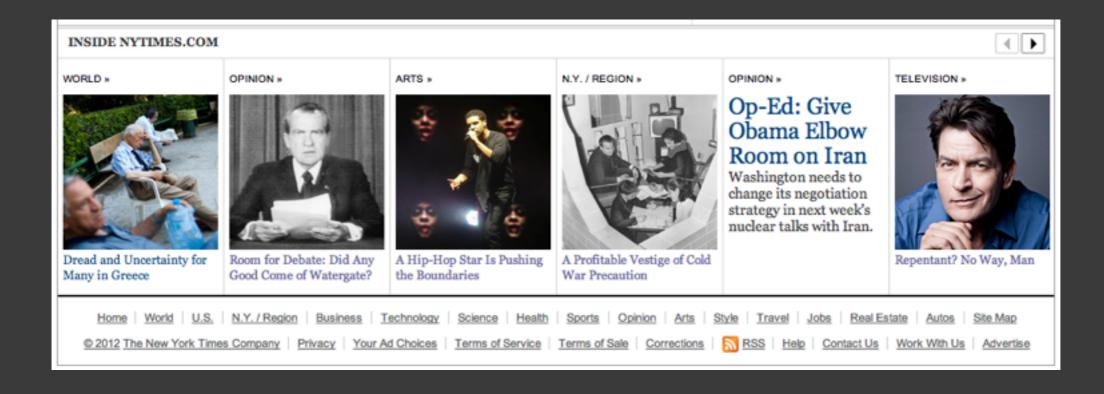
Armstrong Seems to Ready for Battle By JULIET MACUR 1 minute ag

Lance Armstrong, the seven-time Tour de France winner, said he was "exploring





# Inside NYTimes.com



# Sports moments ago

# Woods Plays First Round With Precision

By BILL PENNINGTON



Harry How/Getty Images

Tiger Woods, playing with Phil Mickelson and Bubba Watson, showed who was in charge with a one-under par 69 in the featured pairing of the first round of the 112th United States Open.

# U.S.

## moments ago

# Senate Panel Blocks Rules on Seasonal Jobs

By THE ASSOCIATED PRESS

The vote would delay rules designed to make it more difficult for businesses like seafood processors to exploit foreign workers and to get more Americans into seasonal jobs.

## N.Y. / Region moments ago

# Parlors Face Age-Limit Bill Over Tanning by Teenagers

By ERIC P. NEWCOMER

Teenagers under 17 would be able to get suntans only the old-fashioned way under a bill working is way through the New York State Legislature.

# Opinion moments ago

# Ground Zero Cancers

Adding 50 cancers to the list of illnesses covered by a health fund was the right thing to do because we have an obligation to help those harmed by exposure at ground zero.

# Business Day moments ago

# Smithfield Foods' Profit Drops on Lower Margins for Pork

By THE ASSOCIATED PRESS

The pork producer's net income fell to 49 cents a share from 59 cents a share last year.

# Business Day moments ago

# Anything-but-Ordinary Mom Pitches for Chobani Yogurt

By STUART ELLIOTT

Chobani, the market leader in Greek yogurt in the United States, is advertising its new children's product with a campaign that features the former Olympian Jennie Finch.



## Sports

moments ago

# **Armstrong Seemingly Readies for Battle**

By JULIET MACUR



# World »

 New Political Showdown in Egypt as Court Invalidates Parliament



- Libya Refuses to Release Hague Staff in Custody
- Russian Official Apologizes for Threatening Journalist

# Business Day »

Europe Braces for Greek
 Vote — and Maybe More

- Switzerland and Britain Gird Against the Storm
- High & Low Finance: As Europe's Currency Union Frays, Conspiracy Theories Fly

# Opinion »

 Op-Ed Columnist: Hugs From Iran



- · Editorial: Mr. Dimon on the Hill
- Op-Ed Contributor: Give Obama Elbow Room on Iran

# U.S. »

 In the Facebook Era, Reminders of Loss if Families Fracture



- With Justices Set to Rule on Health Law, 2 Parties Strategize
- Church Battles Efforts to Ease Sex Abuse Suits

# Technology »

 Time Inc. to Sell Its Magazines on Apple's Newsstand



- Nokia to Cut 10,000 Jobs and Close 3 Facilities
- Bits Blog: Google Wants Love and 100 Other Things

# Arts »

 Art Review: Islands Buffeted by Currents of Change



- Living in the Past Is a Full-Time Gig
- Critic's Notebook: Heroes, Villains and the Invisible

# Politics »

Obama Says
 Election Will Shape
 the Economy for
 Years



- Romney Assails Obama for Favoring Words Over Action
- Campaign Aid Is Now Surging Into 8 Figures

# Sports »

Mets 9, Rays 6: Mets Get Just Enough Hitting to Sweep the Rays



- Mets Say Wright (and Scorer)
   Erred
- Burnett Brings a Steady Presence to the Pirates

## Movies »

 Critic's Notebook: Heroes, Villains and the Invisible



- Movie Review | 'Rock of Ages': A Smell of Wine and Cheap Perfume
- Movie Review | 'Your Sister's Sister': Solitary Retreat to a Remote Island Leads to Many Mix-Ups

# N.Y. / Region »

 Behind Those Cool Squirts in Summer, Many Plumbers



 After Century-Long Wait, Stage Is Set for Man Daring to Cross the Falls

# Obituaries »

F. Herbert
Bormann Dies at
90; Helped
Discover Acid Rain
Threat



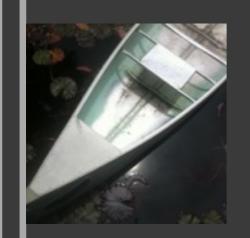
 Henry Hill, Mobster and Movie Inspiration, Dies at 69

## Theater »

 Theater Review: Drawing New Lines in a Romantic Triangle



- Two Journeys Into O'Neill, via E-Mail
- · Arts & Leisure: Mad as Hell, and



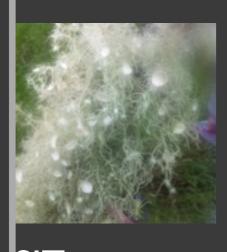


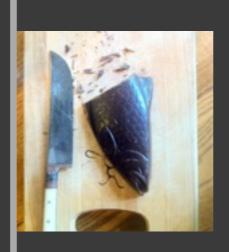


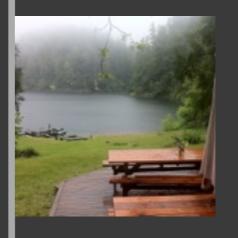


IPSUM

DOLOR







SIT

AMET

CONSECTETUR

Web Applications	cs   42
Interactive Software Design	
Paradigm Shifts in Mobile & Social Computing	
Systems	cs294s
Research Topics in Human-Computer Interaction	<b>n</b> cs376
d.compress - Designing Calm	cs377d
Designing Liberation Technology	cs3791
Beyond Bits & Atoms: Designing Technological	
Tools	cs402
Envisioning the Future of Learninge	duc333B
Press Play: Interactive Device Design	ee47

cs   42	Web Applications
cs294h	Interactive Software Design
cs294s	Paradigm Shifts in Mobile & Social
	Computing Systems
cs376	Research Topics in Human-Computer
	Interaction
cs377d	d.compress - Designing Calm
cs3791	Designing Liberation Technology
cs402	Beyond Bits & Atoms: Designing
	Technological Tools
educ333B	Envisioning the Future of Learning
ee47	Press Play: Interactive Device Design

cs   42	Web Applications Ousterhout		
cs294h	Interactive Software Design Mackay		
cs294s	Paradigm Shifts in Mobile & Social		
	Computing Systems Lam		
cs376	Research Topics in Human-Computer		
	Interaction Bernstein		
cs377d	d.compress - Designing Calm Moraveji, Pea		
cs3791	Designing Liberation Technology Cohen,		
	Winograd		
cs402	Beyond Bits & Atoms: Designing		
	Technological Tools Blikstein		
uc333B	Envisioning the Future of Learning Gilbert, Mehta		
ee47	Press Play: Interactive Device Design Ju		

ed

cs142	Web Applications	
	Ousterhout	
cs294h	Interactive Software Design	
	Mackay	
cs294s	s Paradigm Shifts in Mobile & Social	
	Computing Systems	
	Lam	
cs376	Research Topics in Human-Computer	
	Interaction	
	Bernstein	
cs377d	d.compress - Designing Calm	
	Moraveji, Pea	
cs3791	Designing Liberation Technology	
	Cohen, Winograd	
cs402	Beyond Bits & Atoms: Designing	
	Technological Tools	
	Blikstein	
educ333B	Envisioning the Future of Learning Gilbert, Mehta	
	Dugge Play Intonactive Davide Design	

cs142	Web Applications Ousterhout
cs294h	Interactive Software Design  Mackay
cs294s	Paradigm Shifts in Mobile & Social Computing Systems Lam
cs376	Research Topics in Human-Computer Interaction Bernstein
cs377d	d.compress - Designing Calm Moraveji, Pea
cs3791	Designing Liberation Technology Cohen, Winograd
cs402	Beyond Bits & Atoms: Designing Technological Tools  Blikstein

cs142	Web Applications Ousterhout
cs294h	Interactive Software Design  Mackay
cs294s	Paradigm Shifts in Mobile & Social Computing Systems Lam
cs376	Research Topics in Human-Computer Interaction Bernstein
cs377d	d.compress - Designing Calm Moraveji, Pea
cs3791	Designing Liberation Technology Cohen, Winograd
cs402	Beyond Bits & Atoms: Designing Technological Tools  Blikstein

# When creating templates, design for the longest text block

# In general, left-aligned text is faster to skim

(in places that read left-to-right)

# cs | 42 **Web Applications**Ousterhout

cs294h Interactive Software Design Mackay

cs294s Paradigm Shifts in Mobile & Social Computing Systems

Lam

cs376 Research Topics in Human-Computer Interaction

Bernstein cs377d d.compress - Designing Calm

Moraveji, Pea

cs379| **Designing Liberation Technology** *Cohen, Winograd* 

cs402 Beyond Bits & Atoms: Designing Technological Tools

Blikstein

# STANFORD UNIVERSITY AUTONOMOUS HELICOPTER

# Overview

The goal of this project is to push the state-of-the-art in autonomous helicopter flight: extreme aerobatics under computer control.

# **Featured Videos**





Autonomous airshow

Autonomous Chaos

More videos (including autorotation) below or on our YouTube Channel.

# **Publications**

Autonomous Helicopter Aerobatics through Apprenticeship Learning, Pieter Abbeel, Adam Coates, and Andrew Y. Ng. IJRR, 2010. [IJRR] Dataset

Learning for Control from Multiple Demonstrations, Adam Coates, Pieter Abbeel, and Andrew Y. Ng. ICML, 2008. [ps, pdf] Talk PPT slides, Supplementary Material (Videos)

Best Application Paper Award

Autonomous Autorotation of an RC Helicopter, Pieter Abbeel, Adam Coates, Timothy Hunter, and Andrew Y. Ng. In *International Symposium on Robotics*, 2008. [pdf] Supplementary Material (Videos)

Ben Wegbreit IFRR Student Fellowship Award

An Application of Reinforcement Learning to Aerobatic Helicopter Flight, Pieter Abbeel, Adam Coates, Morgan Quigley, and Andrew Y. Ng. In NIPS 19, 2007. [ps, pdf]

Learning vehicular dynamics, with application to modeling helicopters, Pieter Abbeel, Varun Ganapathi, and Andrew Y. Ng. In NIPS 18, 2006. [ps, pdf]

# Alignment guides the eye, reducing clutter

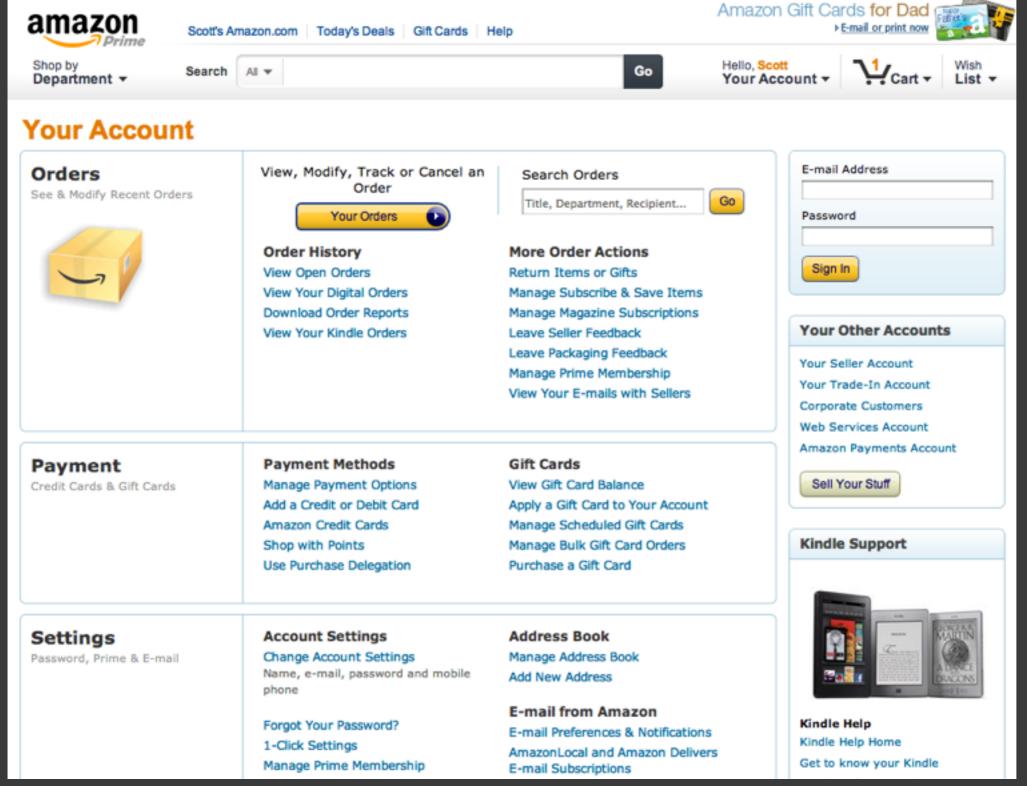
- Avoid slight misalignments they undermine your ability to beacon organization.
- We 'automatically' notice patterns and deviations
- So when you deviate from a pattern do so strategically
- And use visual proximity and scale to convey semantic information

# When to use top, left, and right alignment

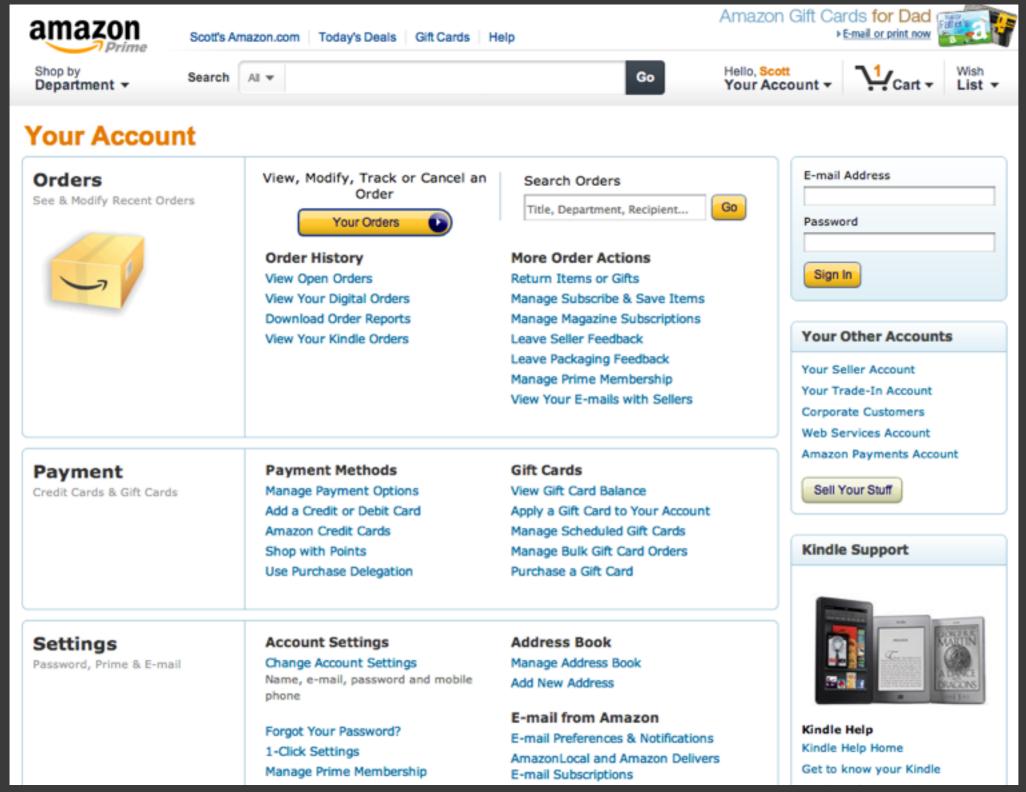
# Add an address: right aligned labels

Add an address				
Full Name:				
Address Line1:	Street address, P.O. box, company name, c/o			
Address Line2:	Apartment, suite, unit, building, floor, etc.			
City:				
State/Province/Region:				
ZIP:				
Country:	United States ‡			
Phone Number:				
Optional Delivery Preferences (What's this?)				
Address Type:	Select an Address Type ‡			
Security Access Code:	For buildings or gated communities			
Save & Add Payment Method Save & Continue				

# Account: Left-aligned labels



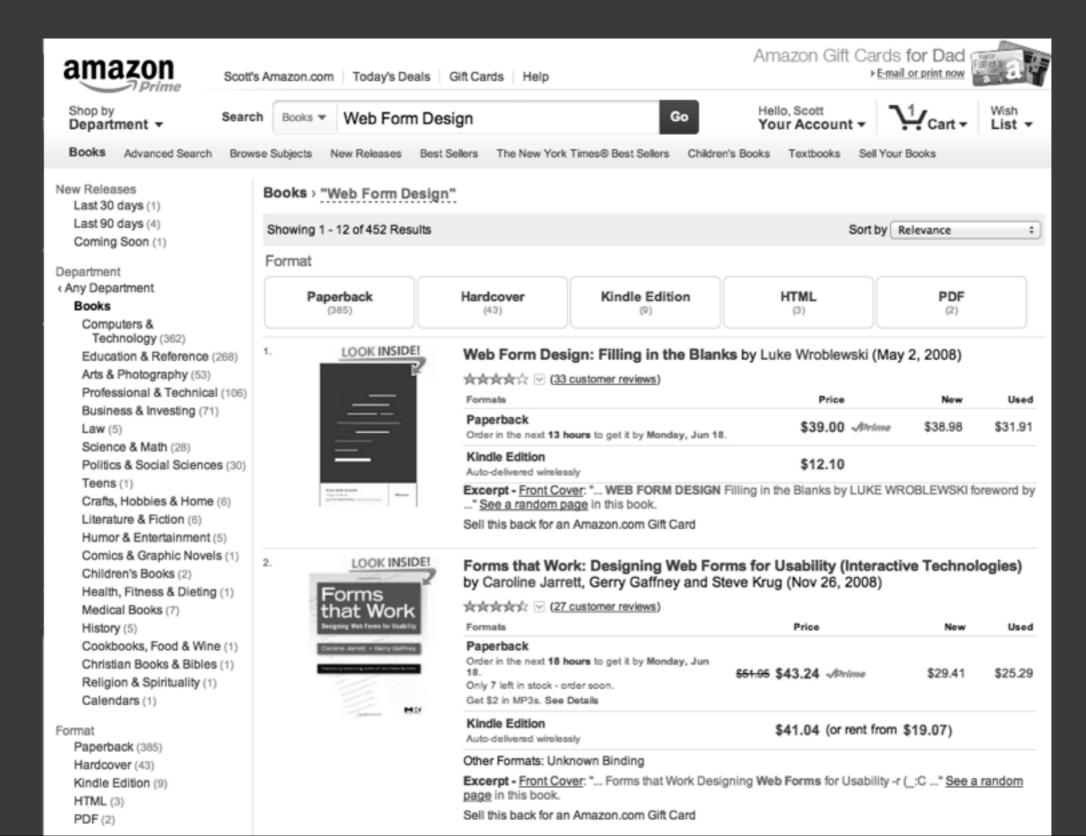
# Sign-in: top-aligned labels



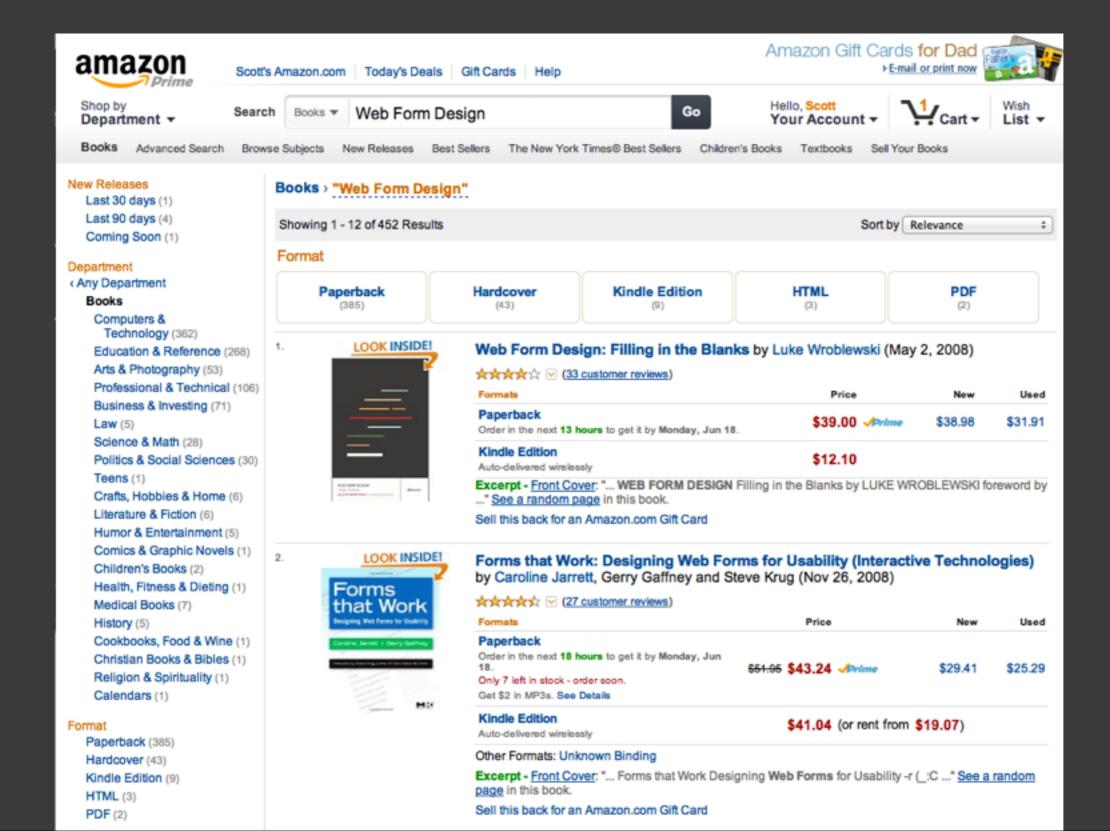
# A brief word on color

- Pay attention to it
- Design in grayscale first
- Keep luminance values from grayscale when moving to color

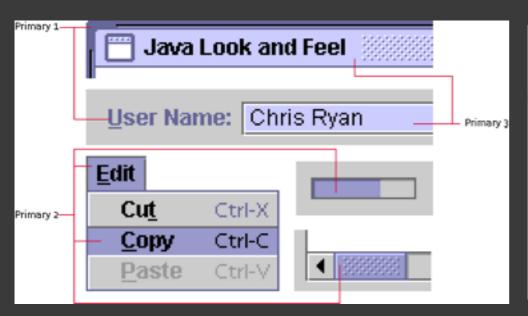
# Amazon in Grayscale

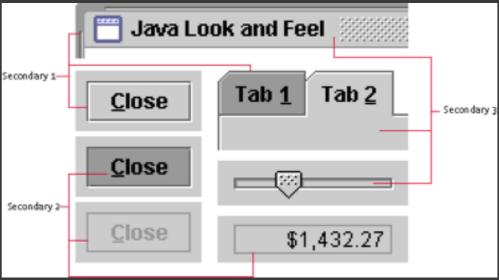


# Amazon in Color



# Color (Java L&F)





- Six colors in two groups
- Clean, consistent look
- Easy on eyes (mostly gray)

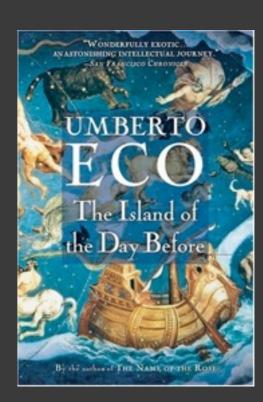
# Make space, guide the eye

I take pride withal in my humiliation, and as I am to this privilege condemned, almost I find joy in an abhorrent salvation; I am, I believe, alone of all our race, the only man in human memory to have been shipwrecked and cast up upon a deserted ship.

Thus, with unabashed conceits, wrote Roberto della Griva presumably in July or August of 1643.

How many days had he been tossed by the waves, feverish surely, bound to a plank, prone during the hours of light to avoid the blinding sun, his neck stiff, strained unnaturally so as not to imbibe the water, his lips burnt by the brine? His letters offer no answer to this question: though they suggest an eternity, the time cannot have been more than two days, for otherwise he would never have survived the lash of Phoebus (of which he so poetically complains), he, a sickly youth, as he describes himself, a creature condemned by a natural defect to live only at night.

He was unable to keep track of time, but I believe the sea grew calm immediately after the tempest swept him from the deck of the *Amaryllis*, on that makeshift raft a sailor had



1

# Major concepts today

- Typography
  - Point, x-height, ascenders, descenders, weight, serifs
  - Choosing fonts
- Navigation
  - Information scent
  - Visual scan paths on the web
- Grids
  - Columns, gutters, leading, alignment
- Color