designing for ajax

Bill Scott
Yahoo! Ajax Evangelist
b.scott@yahoo.com

Y!

background.

developer.yahoo.com/ypatterns

current patterns.

Breadcrumbs. Module Tabs. Navigation Tabs. Auto Complete. Pagination. Item Pagination. Search Pagination. Ratings and Reviews. Architecture of a Review. Rating an Object. Writing a Review. Drag and Drop. Drag and Drop Modules. Transition. Dim. Brighten. Cross Fade. Contract. Expand. Fade In. Fade Out. Move. Self-Healing. Slide. Highlight. Invitation. Cursor Invitation. Drop Invitation. Tool Tip Invitation. Hover Invitation.

yuiblog.com

Idioms
Specific, application specific solutions

Tree

Auto Complete

Slider

Slider, calendar, autocomplete, treeview

Calendar

Widgets
Generic input/output patterns for common tasks

Menu

Windowing

Smaller, faster, network-wide interfaces

Event management, drag and drop, connection manager, animation

Animation

Utilities
Foundational tools for processing

Drag & Drop

In page rich internet applications

XHR

Event

DOM

Platform

Property

classic model. rich model.

interaction. presentation. data.
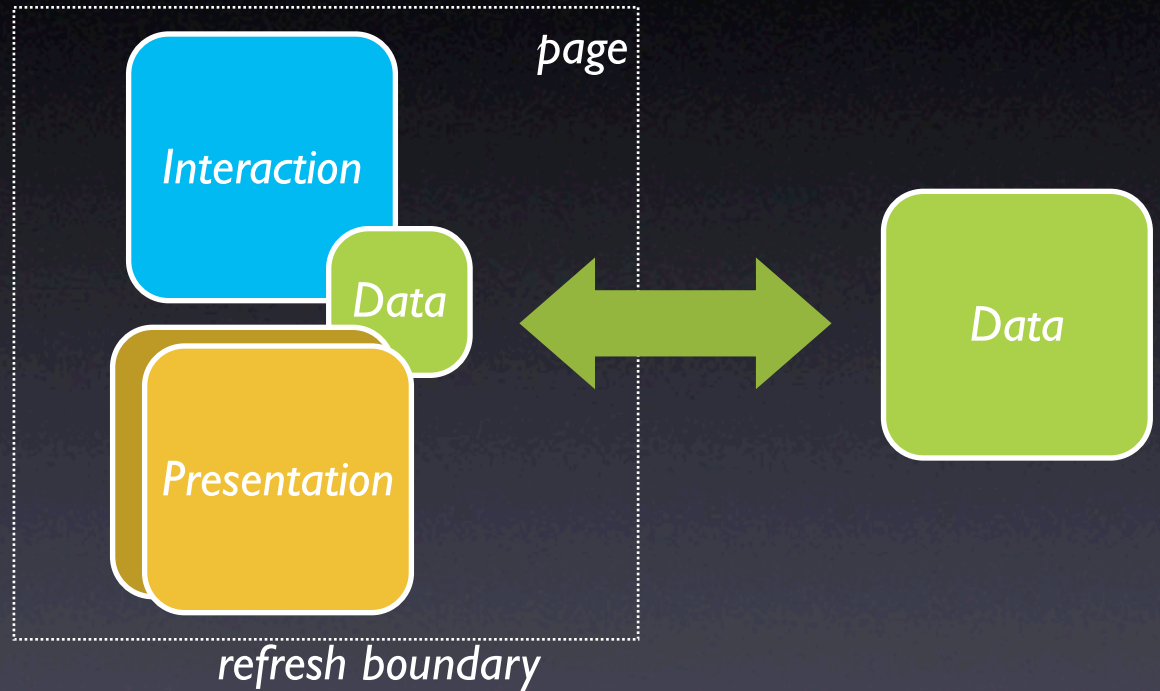
data near. interaction rich.
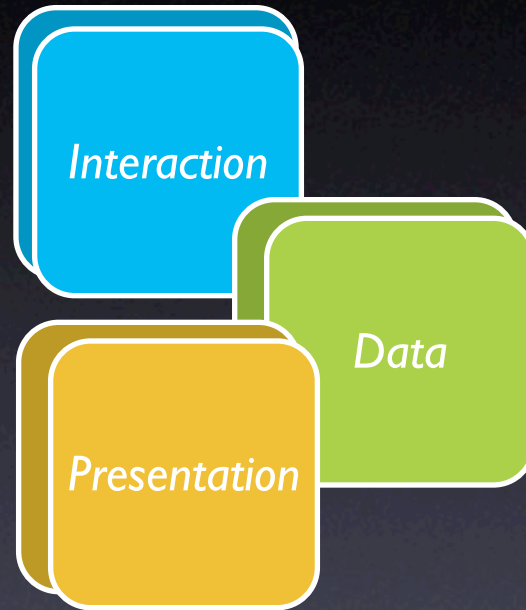
surfacing a vocabulary.

vocabulary. patterns.

Drag and Drop. Drag and Drop Modules. In Page Editing. In Page Custom Editing. Direct State Editing. Grid Cell Editing. Inline Custom Editing. Inline Tag Editing. Popup Custom Editing. Slide-out Custom Editing. Inline Text Editing. Persistent Portals. Inline Reordering. Indication. Busy Indication. Cursor Busy. In Context Busy. In Context Progress. Inline Status. Auto Complete. Balloon Error Tip. Deferred Content Loading. Dynamic Goal. Narrowing Choices. Refining Search. Live Search. Dynamic Filter. Invitation. Cursor Invitation. Drop Invitation. Tool Tip Invitation. Hover Invitation. Detail Zoom. Opacity Focus. Configurable Module - Faceplate. Configurable Module - Flip It. Configurable Module - Inline Configure. Configurable Module - Slide Out Drawer. Slide Out. Flip. Opacity Fade. Endless Scrolling. Expandable Paging Boundary. Fresh Content. Hover Detail. In Place Drill Down. Inline Assistant. Inline Validation. Validate Then Suggest. On Demand Refresh. Periodic Refresh. Resizable Modules. Scrolling Modules. Auto Save. In Context Tools. Remembered Collection. Remembered Preferences. Auto Form Fill. Rating an Object. Transition. Brighten Transition. Cross Fade Transition. Dim Transition. Expand Transition. Fade In Transition. Fade Out Transition. Flip Transition. Move Transition. Self-Healing Transition. Collapse Transition. Slide Transition. Rich Internet Object. Available. Selected. Identifiable Object.

design principles

principle. make it direct.

pattern. drag and drop.
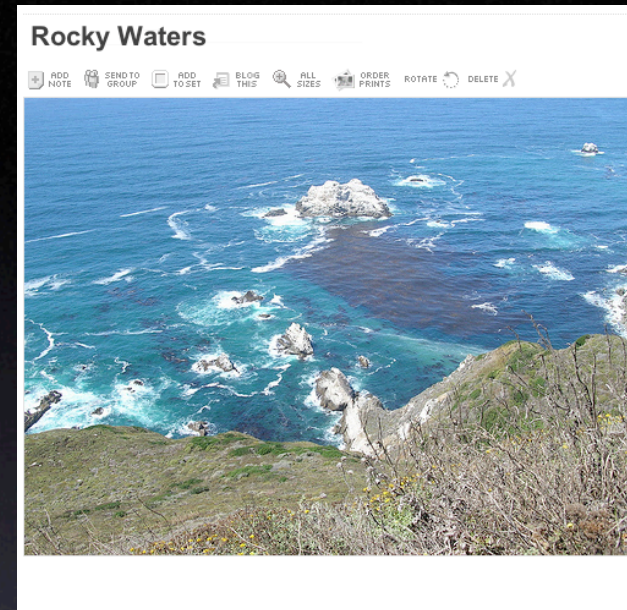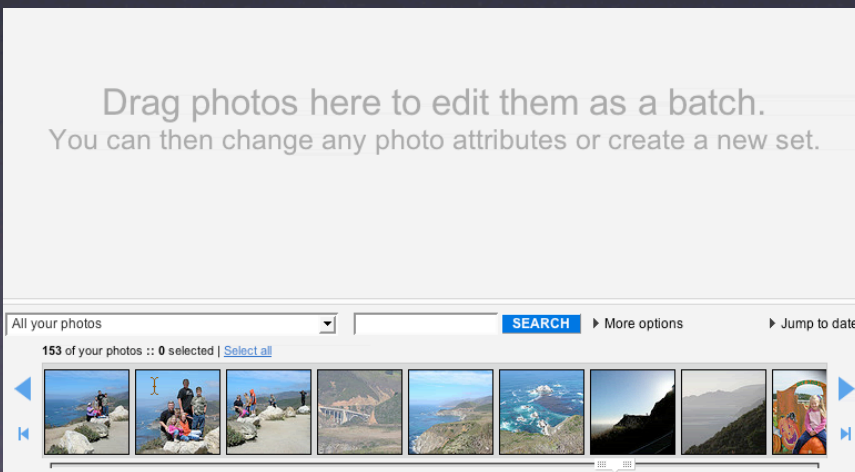
pattern. inline editing.

pattern. in-context tools.

Prefer interaction within the page

What about discoverability?

Prefer interaction within the page
What about discoverability?

Use direct editing on page content
What about save/cancel?
Avoid page jitter
Reduce the feeling of modes

State park near our new home in San Jose (next to Milpitas)

SAVE OR CANCEL

Y!

Prefer interaction within the page
What about discoverability?

Use direct editing on page content
What about save/cancel?
Avoid page jitter
Reduce the feeling of modes

Pick Up at the Store
☐ Milk
☐ Orange Juice
☐ Tomatoes
☐ Lettuce
☐ Bread
☐ Chips
Add item

Make a new list   Reorder lists

Remove from sidebar, Delete this page, Email me this page
✉ Send email to this page: miles12betty@billwscott.backpackit.co

Changes   Help   Text Formatting   Weblog   Forum   Privacy

☐ Create a home page for the VisDe to make findability easier
🗑 Edit ☐ Account for experimental patterns as well as established patterns

Provide in-context tools
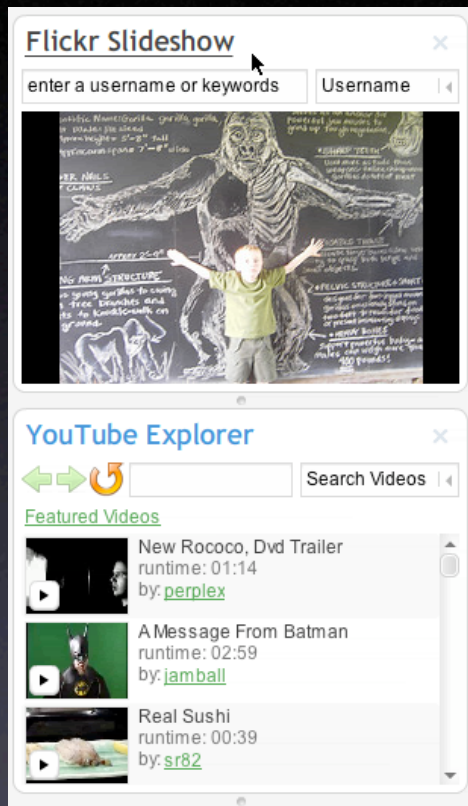Only good for single operations
Can actually slow you down

Y!

Prefer interaction within the page

What about discoverability?

Use direct editing on page content

What about save/cancel?
Avoid page jitter
Reduce the feeling of modes

Provide in-context tools
Only good for single operations
Can actually slow you down
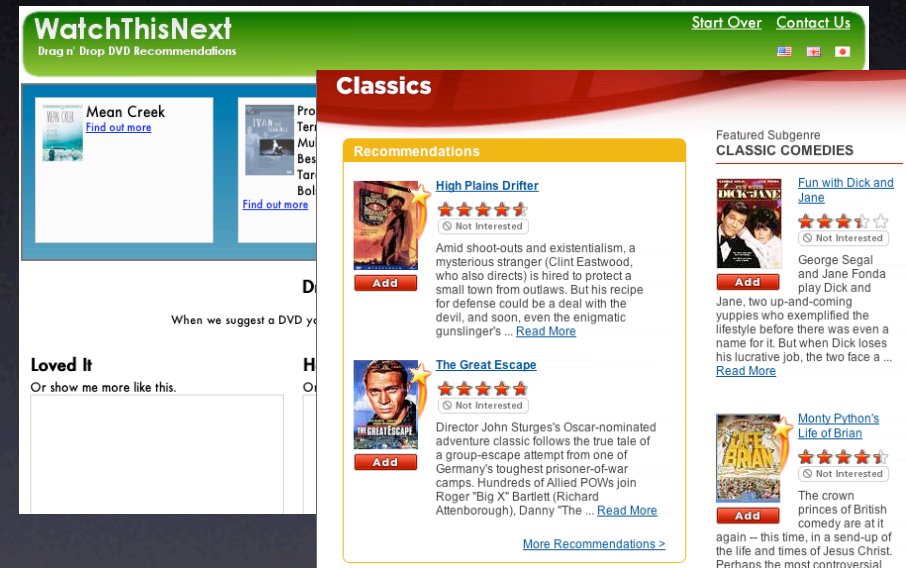
Use drag and drop where appropriate
Not for simply setting an attribute
Good for layout changes or containment
Needs transitions

principle. keep a light footprint.

pattern. rating an object.

pattern. remembered collection.

pattern. in page action.

Watch your click weight

Keep actions immediate and light
Count "clicks"

Watch your click weight
Keep actions immediate and light
Count "clicks"

Design for engaging moments
Use invitations
Keep it fun, exciting and light
Treat it like an impulse aisle

Watch your click weight
Keep actions immediate and light
Count "clicks"

Design for engaging moments
Use invitations
Keep it fun, exciting and light
Treat it like an impulse aisle

RECOMMEND THIS STORY

Recommend It:
☆ ☆ ☆ ☆ ☆

Average (63 votes)
★ ★ ★ ★ ★

Use lightweight events
Hover
Blur, focus
Click. Avoid double-click

Y!

principle. cross borders reluctantly.
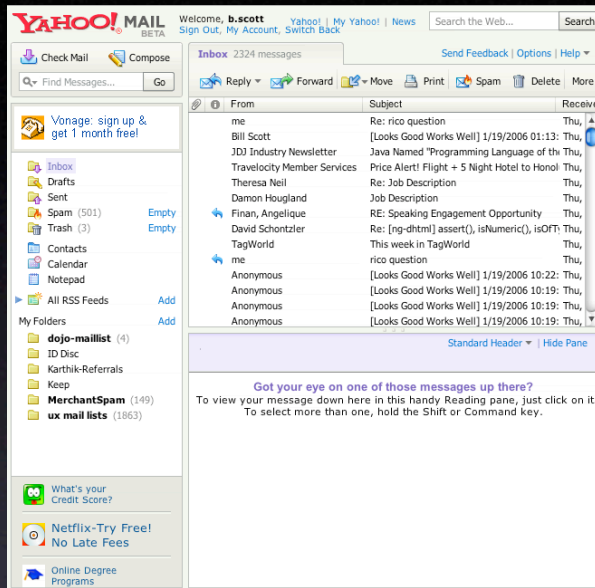
pattern. endless scrolling.
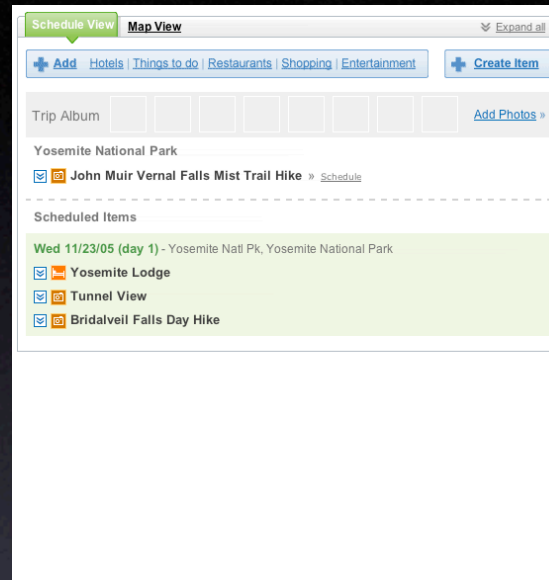
pattern. in-context expand.
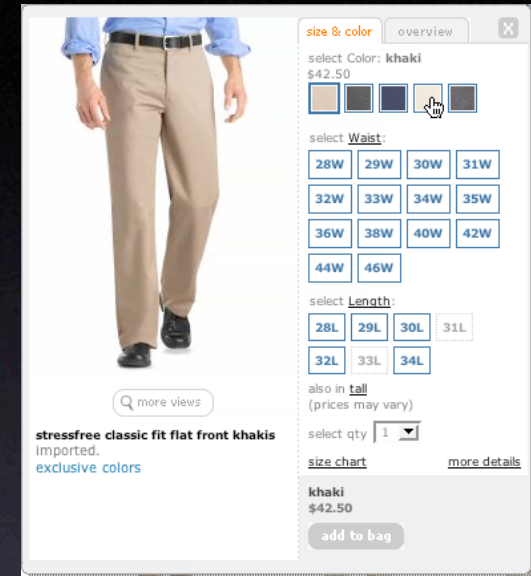
pattern. inline assistant.

pattern. hover details.

pattern. lightweight popup + lightbox

Rethink process flows

Its the user's model, not the page model

Every page jump is a mental speed bump

Rethink process flows

Its the user's model, not the page model

Every page jump is a mental speed bump

Rethink paging

Its the user's model, not the paging model

Use scrolling for "owned" data

Watch out for dual scroll bar issue

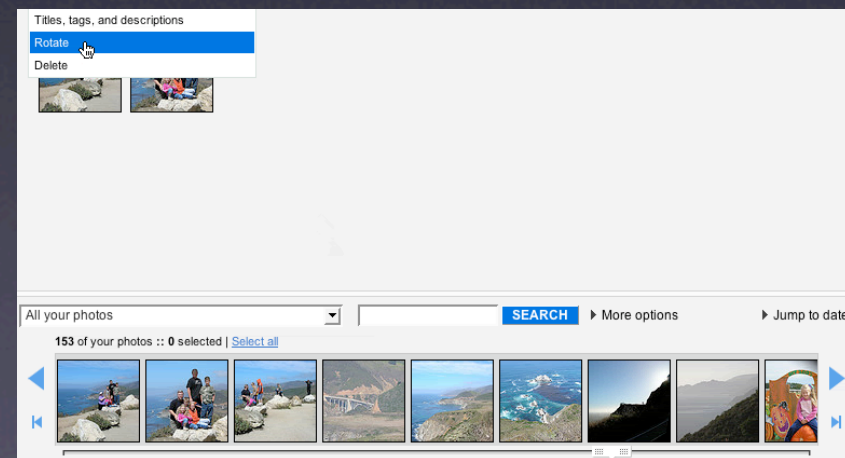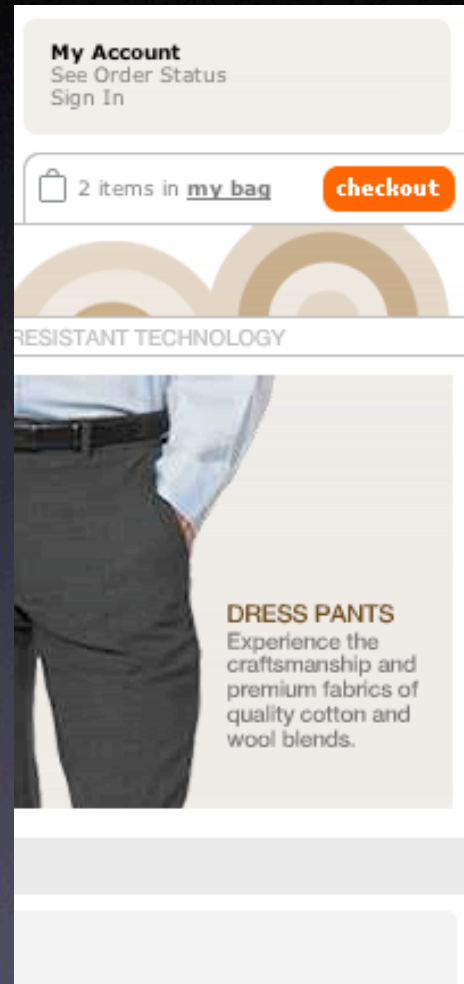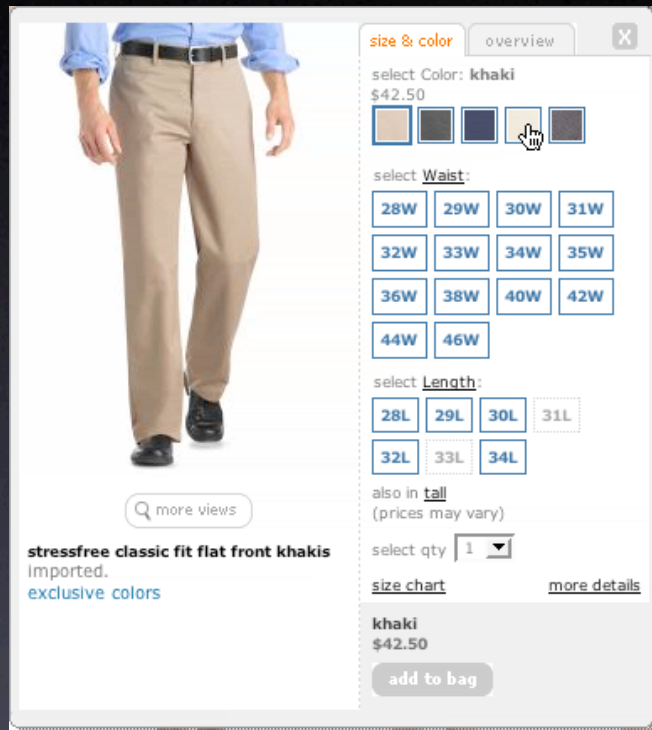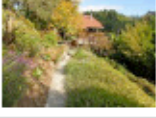| Photo Click for info	Price	Bd/Ba Sq Ft	Address and Area Presented By	MLS # (Click for info)	More Photos (Click for	Virtual Tours (Click for
	$1,750,000 Single Res	6+, 4+ 3700	14080 BEAR CREEK RD Boulder Creek, CA 95006 (San Lore Valley) Schwarzbach Associates			
	$1,995,000 Single Res	6+, 4+ 5675	17617 MOUNTAIN CHARLIE RD LOS GATOS, CA 95033 (Unincorporated Los Gatos Mtns) Almaden Oaks Realtors			
	$2,286,000 Single Res	5, 4+ 4800	20930 PANORAMA DR Los Gatos, CA 95033 (Los Gatos M Alain Pinel Realtors			
	$2,750,000 Single Res	5, 4+ 5000	155 LARITA DR Ben Lomond, CA 95005 (San Lorer Valley) Network Alliance Real Estate			
	$2,777,000 Single Res	5, 4+ 5819	777 HAPPY VALLEY RD Scotts Valley, CA 95065 (Scotts Val Linda Burroughs Real Estate			

New Search   << Pre

RICO AJAX SEARCH

LiveGrid Demonstration   Powered by Yahoo! Search

Select Search Category: Web   Images   Videos

Search Images: flowers   Search Yahoo!

Search Results   Results 1 - 5 of about 1580284 for flowers

flowers 025
flowers021jpg 110k 29Feb2004 flowers022jpg 783k 29Feb2004 flowers023jpg 186k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.3MB

flowers 063
flowers059jpg 122k 29Feb2004 flowers060jpg 134k 29Feb2004 flowers061jpg 120k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.1MB

flowers 045
flowers041jpg 277k 29Feb2004 flowers042jpg 125k 29Feb2004 flowers043jpg 744k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.1MB

flowers 076
flowers072jpg 820k 29Feb2004 flowers073jpg 160k 29Feb2004 flowers074jpg 120k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.1MB

flowers 019
flowers015jpg 781k 29Feb2004 flowers016jpg 455k 29Feb2004 flowers017jpg 143k
http://wp.li.ru/flowers
1024x768 - jpeg fmt - 0.3MB

Y!

Rethink process flows
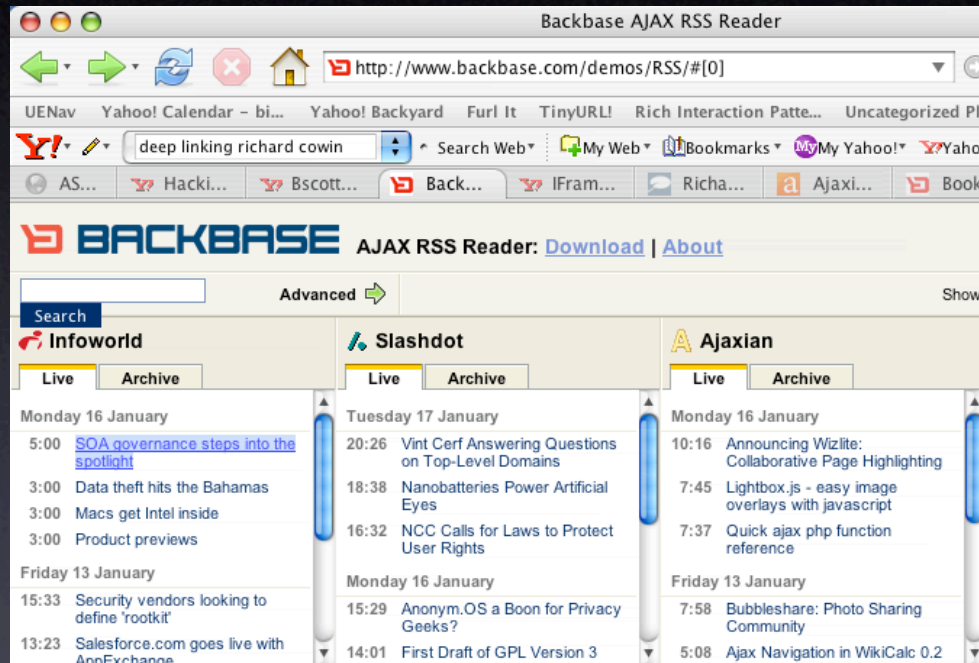
Its the user's model, not the page model

Every page jump is a mental speed bump

Rethink paging

Its the user's model, not the paging model

Use scrolling for "owned" data

Watch out for dual scroll bar issue

Plan for linking, crawling and back button

Not everything is a single page application

What will the user think the back button does?

Use overlays

For momentary interruption

Replace page transition

When editing an individual, more complex item

Be symmetrical

Not disturb the page

Use overlays

For momentary interruption
Replace page transition
When editing an individual, more complex item
Be symmetrical
Not disturb the page

Use in-context expands

For editing part of a collection
Need to see surrounding context
For managing content modules

key principle

Prefer direct, lightweight, in-page interaction.

principle. give live feedback.

pattern. live suggest.

pattern. auto complete.

Keep the goal in mind
Design for immediacy

Is it narrowing or is it distracting

Use feedback to boost confidence

Let the user iterate where possible

Just-in-time data

Just-in-time logic

Keep the goal in mind

Design for immediacy
Is it narrowing or is it distracting
Use feedback to boost confidence
Let the user iterate where possible

Keep the goal in mind
Design for immediacy
Is it narrowing or is it distracting
Use feedback to boost confidence
Let the user iterate where possible

Keep the user engaged
Time passes faster
Look for engaging moments

Connecting…

Y!

Keep the goal in mind
Design for immediacy
Is it narrowing or is it distracting
Use feedback to boost confidence
Let the user iterate where possible

Keep the user engaged
Time passes faster
Look for engaging moments

Find a domain name:

www. billsportfolio.com   Search
(ex. widgetdesigns.com)

Required information for Google account

Your current email address: someone@somewhere.com
e.g. myname@example.com. This will be your username and sign-in.

Choose a password: Password strength: Too short
Minimum of 6 characters in length.

Use live-previews
Look before you leap

Keep the goal in mind
Design for immediacy
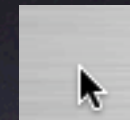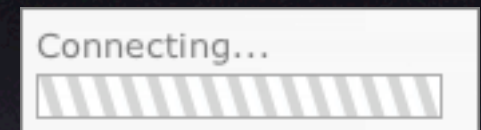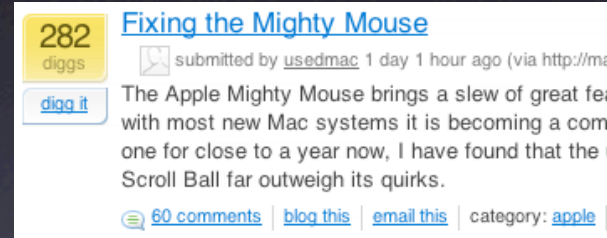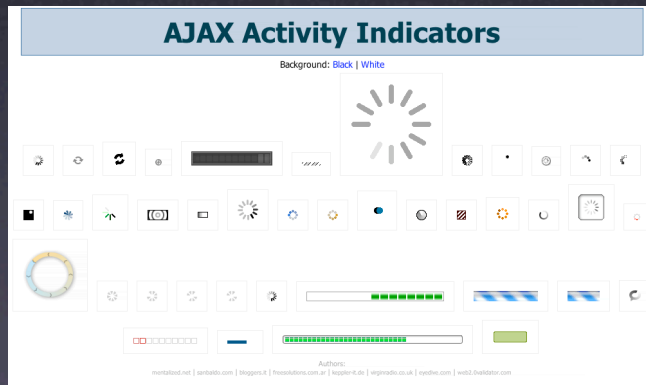Is it narrowing or is it distracting
Use feedback to boost confidence
Let the user iterate where possible

Keep the user engaged
Time passes faster
Look for engaging moments

Use live-previews
Look before you leap
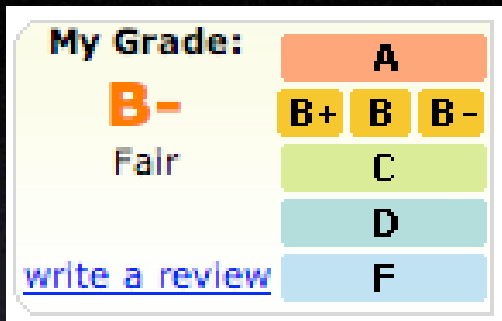
Keep feedback focused
Keep it in context
Updating too many areas at once will be confusing
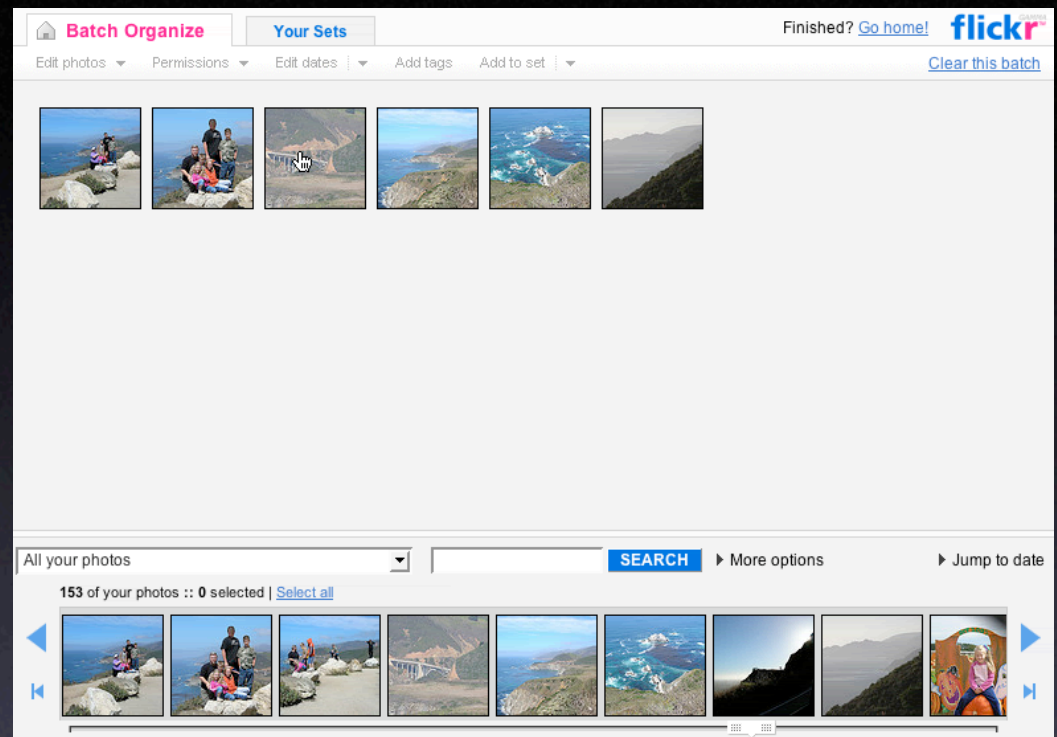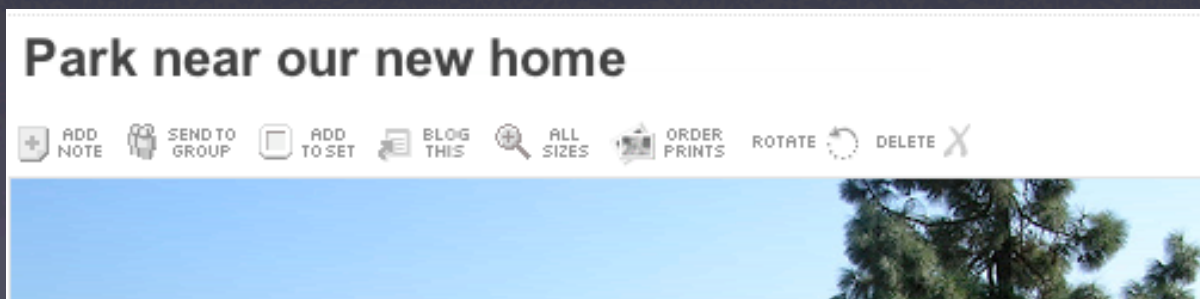Show dynamically what is relevant
Avoid creating feedback noise/jitter

principle. offer an invitation.

pattern. hover invitation.

pattern. drop invitation.

pattern. tooltip invitation + hover invitation.

Make it engaging

Use lightweight events as a welcome mat
Rediscover the hover

Make it engaging
Use lightweight events as a welcome mat
Rediscover the hover

Keep actions out of it
Don't make the user afraid to explore
Don't proselytize

Make it engaging
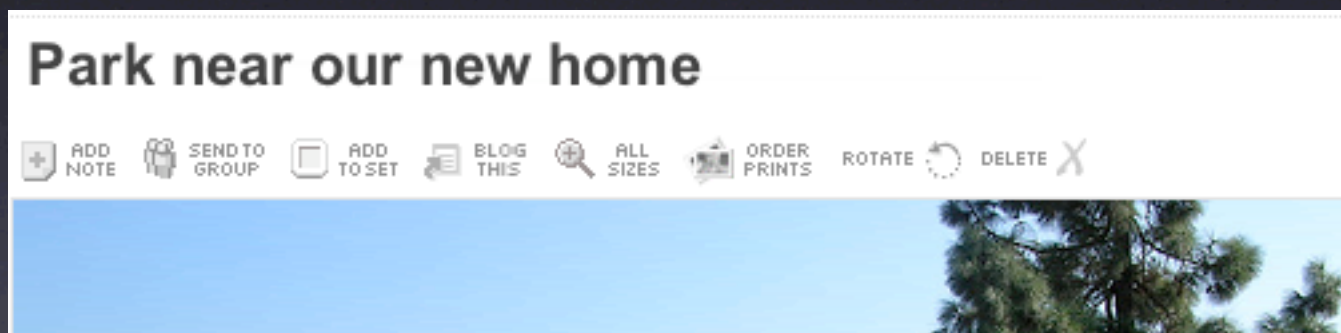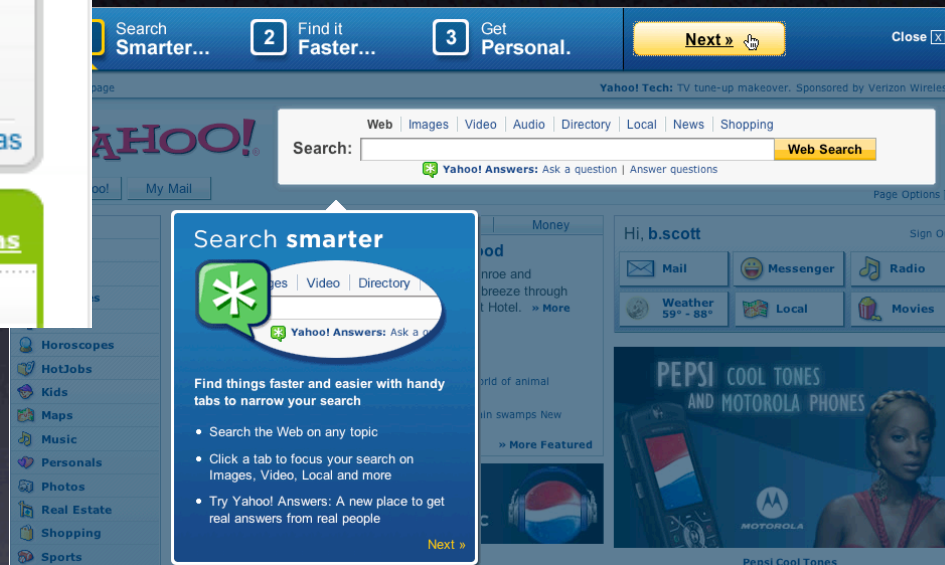Use lightweight events as a welcome mat
Rediscover the hover

Keep actions out of it
Don't make the user afraid to explore
Don't proselytize

Park near our new home

ADD NOTE SEND TO GROUP ADD TO SET BLOG THIS ALL SIZES ORDER PRINTS ROTATE DELETE X

Get the actors involved
Hover Invitation
Cursor Invitation
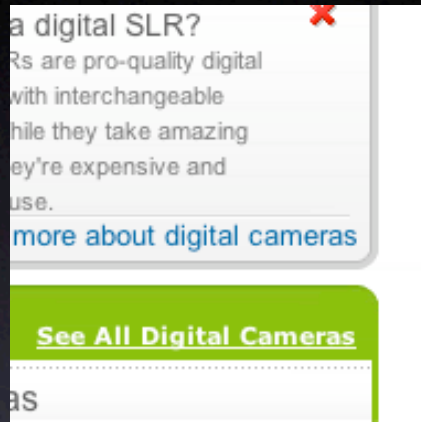Tooltip Invitation

Y!

Make it engaging

Use lightweight events as a welcome mat

Rediscover the hover

Keep actions out of it

Don't make the user afraid to explore

Don't proselytize

Use invitations to aid discoverability

Two challenges: idiom & feature

Adding signposts, always-on clues doesn't scale

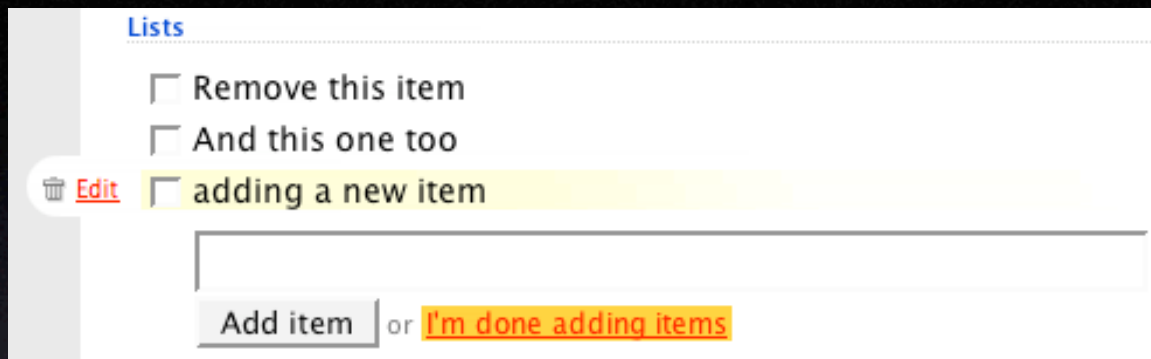Add tours, help pedals, tips, spotlights

Get the actors involved

Hover Invitation
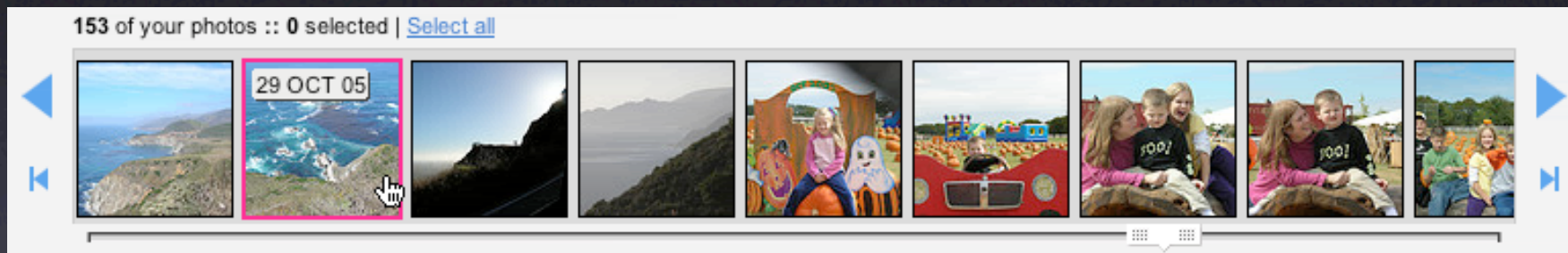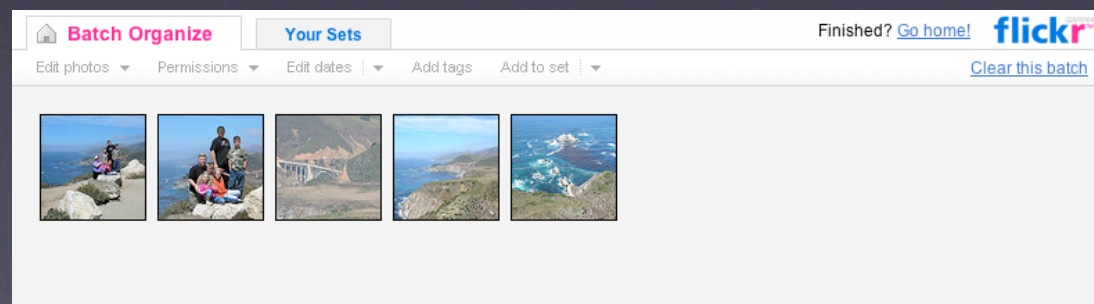
Cursor Invitation

Tooltip Invitation

principle. show transitions.

pattern. fade transition + self-healing transition.
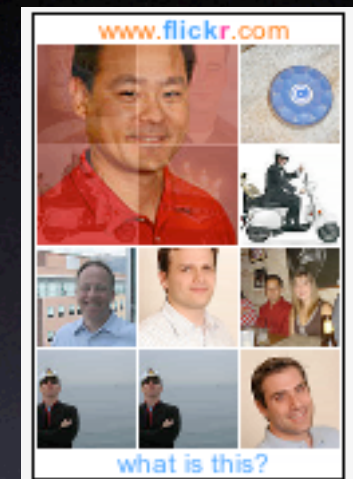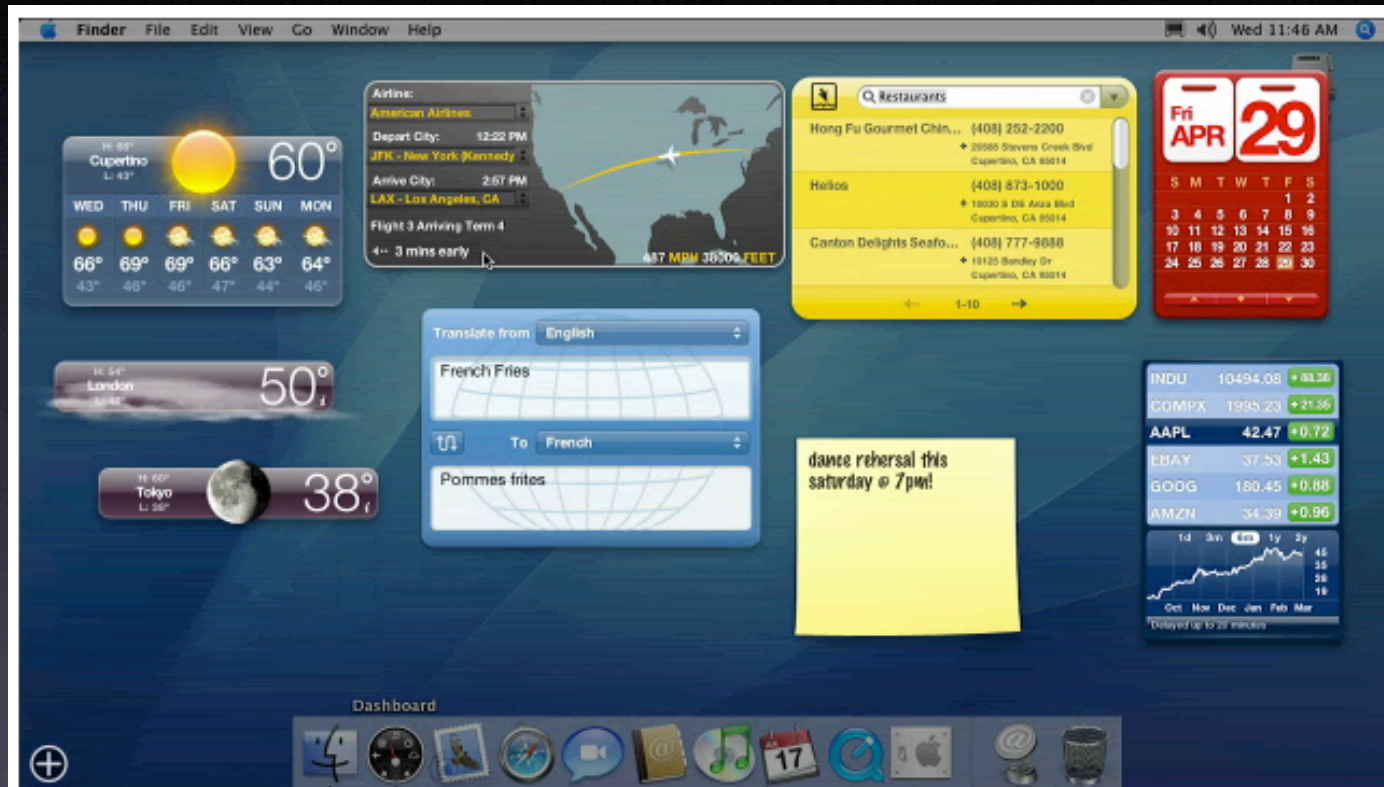

pattern. slide + animate.

pattern. spotlight.

Speak to the BRAIN
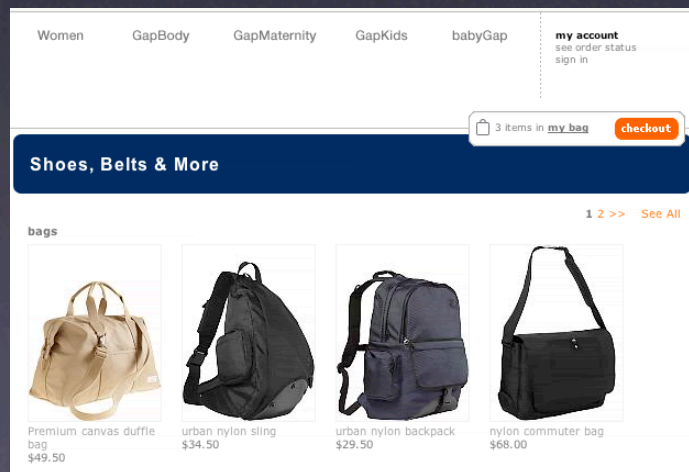Understanding attention processing
Sending the wrong message

Speak to the BRAIN
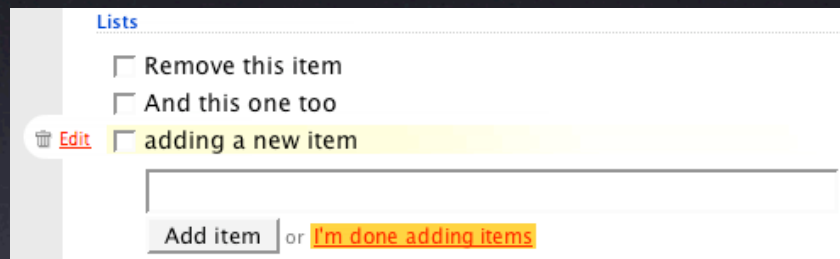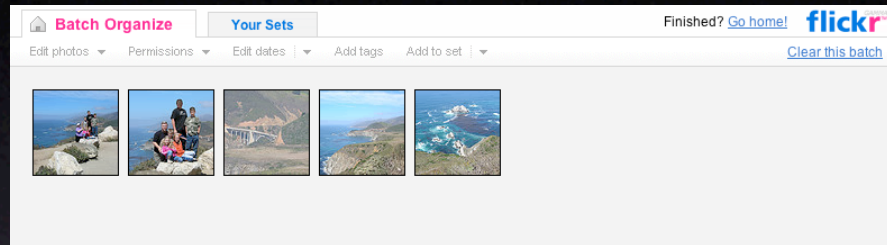### Understanding attention processing
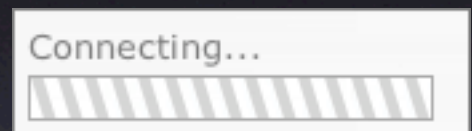### Sending the wrong message

What you can communicate
Speed up time
Slow down time
Show state change
Show relationships between objects
Focus attention

Speak to the BRAIN
Understanding attention processing
Sending the wrong message

What you can communicate
Speed up time
Slow down time
Show state change
Show relationships between objects
Focus attention

Keep it sane
"Cut in half" rule of thumb
Use a "contrast knob" approach
Don't overuse

key principle

Provide invitations beforehand,
transitions during,
and feedback after interaction

principle. think in objects.

pattern. Shareable Object.

Rethinking the model

What is the user's mental model?
How to distinguish from content?

Rethinking the model
What is the user's mental model?
How to distinguish from content?

The power of sharing
Bloggable, shareable, findable
How to dial-in community
Collections

Rethinking the model
What is the user's mental model?
How to distinguish from content?

The power of sharing
Bloggable, shareable, findable
How to dial-in community
Collections

Web 2.0 as a platform
Rich objects fit the SOA model
Creates a good separation of concerns
Mashups

key principle

Think in terms of the user's mental model and their primary goals

key principles

Prefer direct, lightweight, in-page interaction.

Provide invitations beforehand, transitions during, and feedback after interaction.

Think in terms of the user's mental model and their primary goals.olutions.

rich patterns.

Drag and Drop. Drag and Drop Modules. In Page Editing. In Page Custom Editing. Direct State Editing. Grid Cell Editing. Inline Custom Editing. Inline Tag Editing. Popup Custom Editing. Slide-out Custom Editing. Inline Text Editing. Persistent Portals. Inline Reordering. Indication. Busy Indication. Cursor Busy. In Context Busy. In Context Progress. Inline Status. Auto Complete. Balloon Error Tip. Deferred Content Loading. Dynamic Goal. Narrowing Choices. Refining Search. Live Search. Dynamic Filter. Invitation. Cursor Invitation. Drop Invitation. Tool Tip Invitation. Hover Invitation. Detail Zoom. Opacity Focus. Configurable Module - Faceplate. Configurable Module - Flip It. Configurable Module - Inline Configure. Configurable Module - Slide Out Drawer. Slide Out. Flip. Opacity Fade. Endless Scrolling. Expandable Paging Boundary. Fresh Content. Hover Detail. In Place Drill Down. Inline Assistant. Inline Validation. Validate Then Suggest. On Demand Refresh. Periodic Refresh. Resizable Modules. Scrolling Modules. Auto Save. In Context Tools. Remembered Collection. Remembered Preferences. Auto Form Fill. Rating an Object. Transition. Brighten Transition. Cross Fade Transition. Dim Transition. Expand Transition. Fade In Transition. Fade Out Transition. Flip Transition. Move Transition. Self-Healing Transition. Collapse Transition. Slide Transition. Rich Internet Object. Available. Selected. Identifiable Object.

surfacing a vocabulary.

surfacing a vocabulary.
code. accessibility. examples.
rationale. solutions. articles.
discussion. etc.

developer.yahoo.com/ypatterns

open patterns.

Yahoo! service responds with a JSON representation of a pattern. Allows anyone to mashup the patterns into a corporate pattern library

Pattern Service

Corporate Branded Pattern Site (mashup)

pattern library.	developer.yahoo.com/ypatterns
yahoo! blog.	yuiblog.com
my blog.	looksgoodworkswell.com
this presentation.	billwscott.com/share/presentations/cnet/