



Designing for Mice & Men*

Bill Scott, Netflix

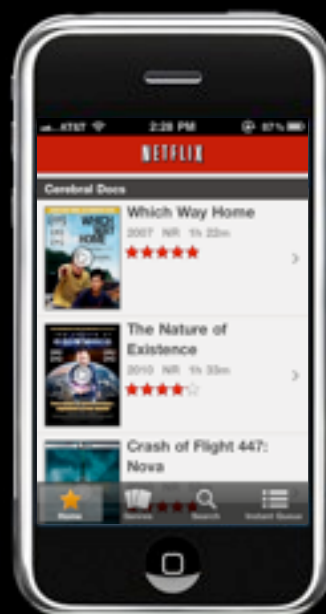
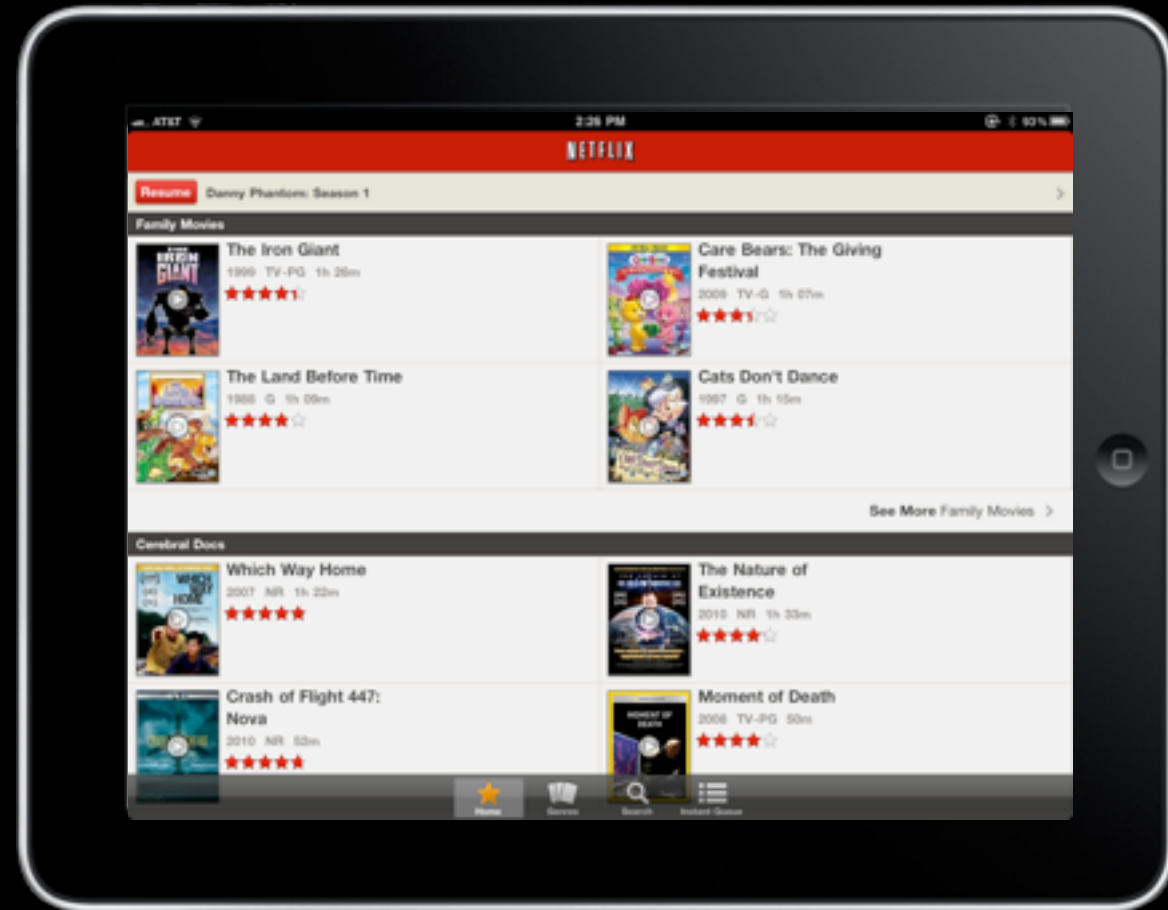


Designing for Mice & Men*

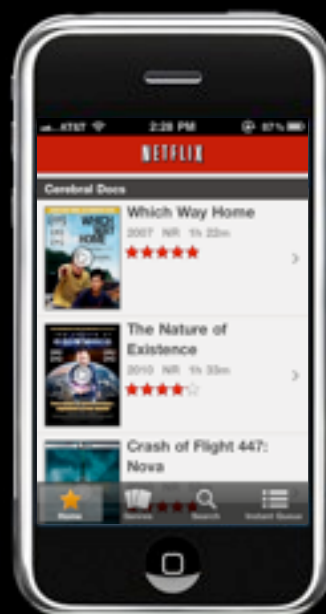
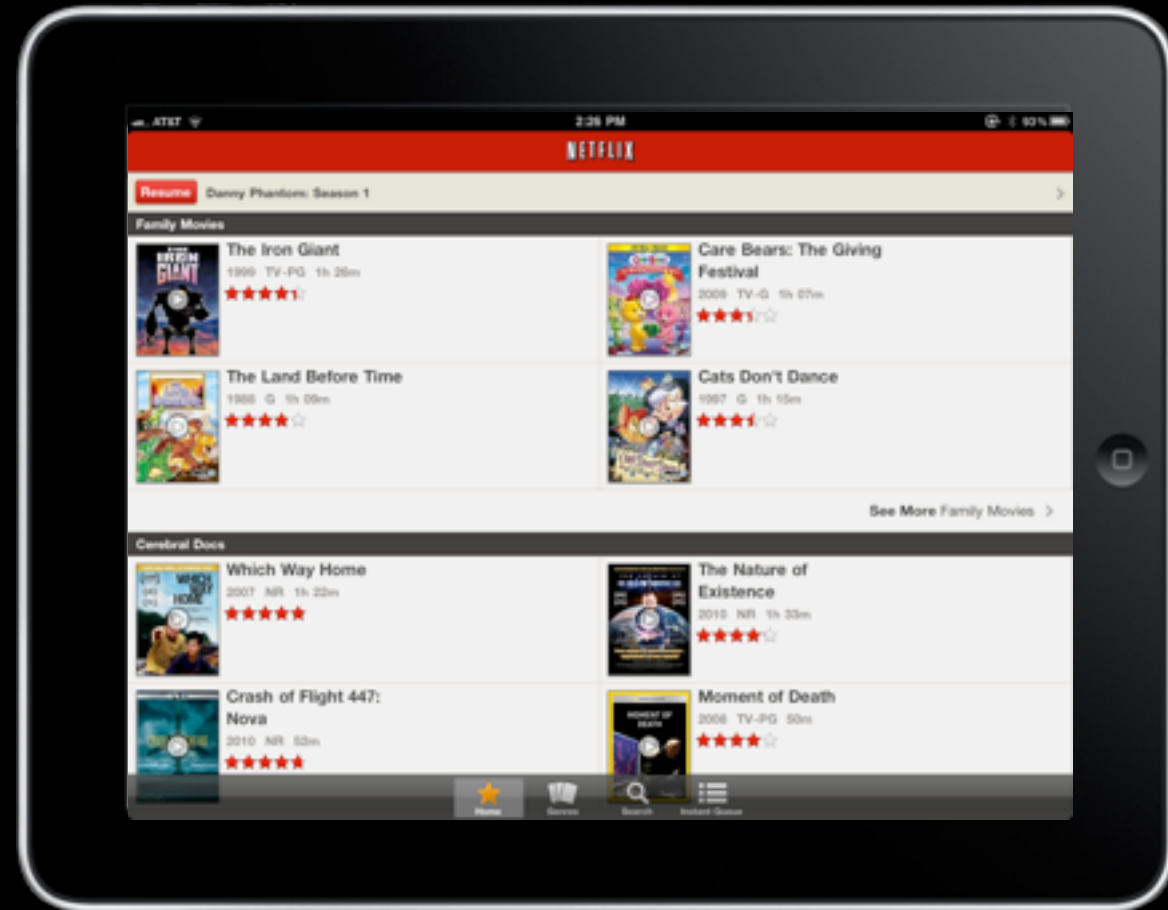
***and women too!**

Bill Scott, Netflix

Netflix "Owned" Experience Across Devices



Netflix Across Devices (in-house products)



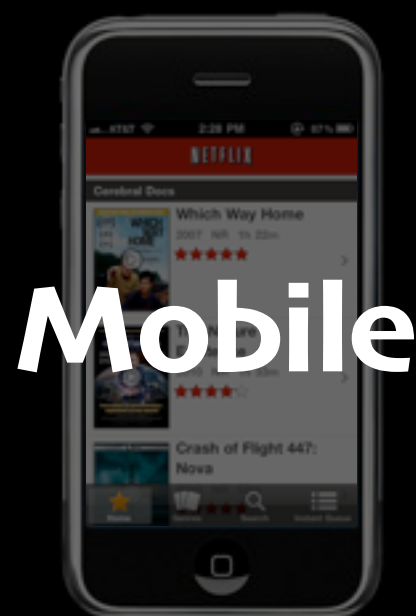
Netflix Across Devices (in-house products)



Web



Tablet

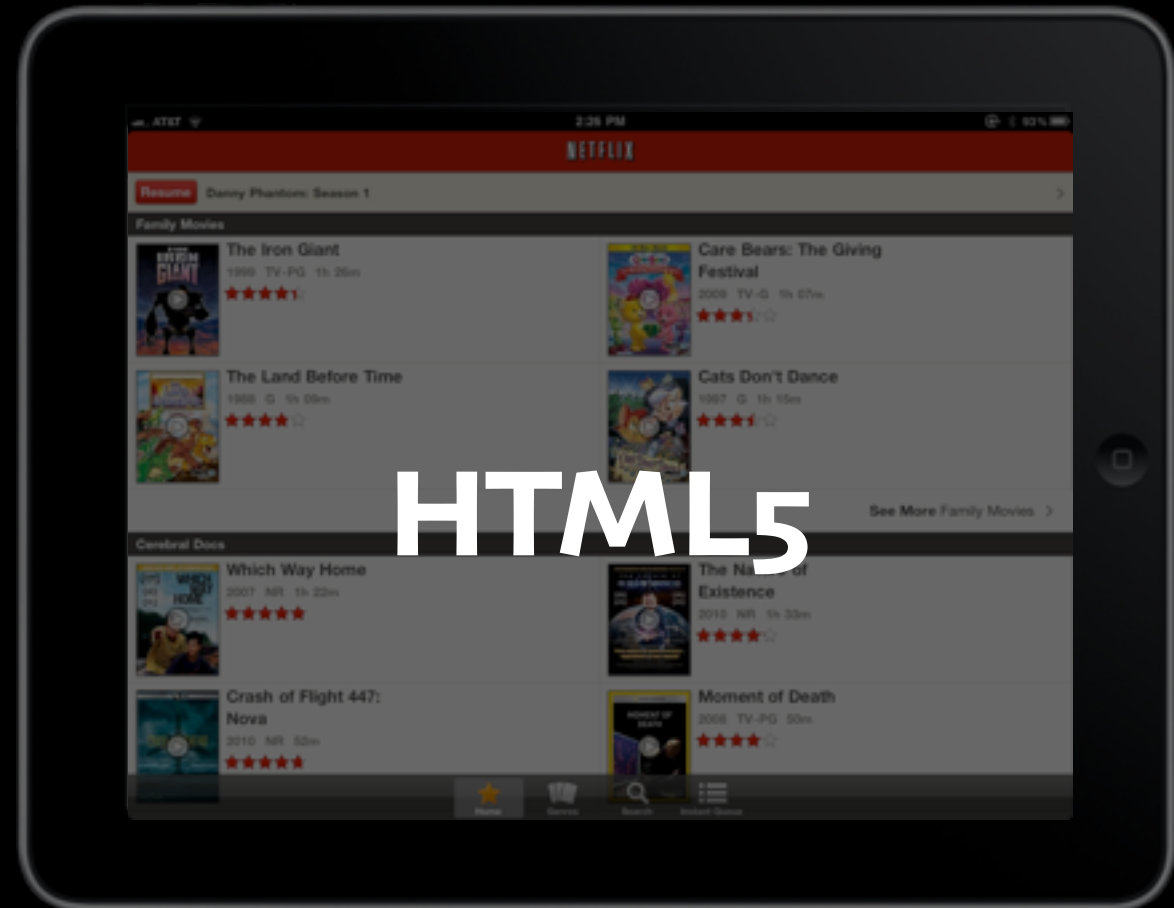


Mobile



TV

Netflix Across Devices (in-house products)



Common Platform Across Devices



Why own the experience?

Why own the experience?

Known for valuing UX -- can't do it if you don't own it

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Love server-driven, testable, dynamic UIs

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Like agile Web better than rigid CE firmware process

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Value “Learn Fast/Fail Quickly”

Why own the experience?

Known for valuing UX -- can't do it if you don't own it

Love server-driven, testable, dynamic UIs

Like agile Web better than rigid CE firmware process

Value "Learn Fast/Fail Quickly"

The reality is any other path is chaos

Initial HTML5 Experience: PS3 - "Special"

NETFLIX

Recently Watched

Suggestions for You

MORE

New Arrivals

Genres

Instant Queue

Search

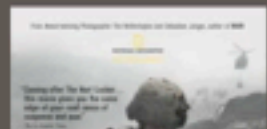


TV



✕ View more suggestions

Emotional Movies



Alternate HTML5 Experience: PS3 - "Plus"

NETFLIX

2 / 332

Search

Instant Queue



Bella

2006 PG-13 1h 31m



Two lost souls – Nina, a pregnant, unmarried waitress, and Jose, an introspective cook with a tragic past – find solace in each other as their lives become unpredictably linked throughout the course of one incredible day.

Cast: Eduardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

Director: Alejandro Gomez Monteverde

Recently Watched



Emotional Dramas

Designing Across Platforms

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Chose a portability layer (html5, css3, JS)

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However, don't use progressive enhancement since want the freedom to experiment with different UX on different platforms

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Design for user posture, input capabilities, navigation styles and display capabilities

Designing Across Platforms

Chose a portability layer (html5, css3, JS)

However, don't use progressive enhancement since want the freedom to experiment with different UX on different platforms

Design for user posture, input capabilities, navigation styles and display capabilities

Embrace the constraints (design for mobile first!)

Designing for *Mice & Men*

Designing for Mice & Men



Web

Input

Indirect.

Pointer/keyboard

Navigation

Controls & windows

Posture

Stationary

Working

Display

Hi-Rez

Large,

Near

Designing for Mice & Men



Web

Input
Indirect.
Pointer/keyboard

Navigation
Controls & windows

Posture
Stationary
Working

Display
Hi-Rez
Large,
Near



TV
10' UI

Input
Indirect.
LRUD/OSK

Navigation
Panes

Posture
Lean Back
Relaxing

Display
Hi-Rez
Large
Far-away

Designing for Mice & Men



Web

Input
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Working

Display
Hi-Rez
Large,
Near



TV
10' UI

Input
Indirect.
LRUD/OSK

Navigation
Panes

Posture
Lean Back
Relaxing

Display
Hi-Rez
Large
Far-away



Mobile

Input
Direct.
Gesture/OSK

Navigation
Panes

Posture
On-the-go
In Hand

Display
Hi-Rez
Small
Near

Designing for Mice & Men



Web

Input
Indirect.
Pointer/keyboard

Navigation
Controls & windows

Posture
Stationary
Working

Display
Hi-Rez
Large,
Near



TV
10' UI

Input
Indirect.
LRUD/OSK

Navigation
Panes

Posture
Lean Back
Relaxing

Display
Hi-Rez
Large
Far-away



Mobile

Input
Direct.
Gesture/OSK

Navigation
Panes

Posture
On-the-go
In Hand

Display
Hi-Rez
Small
Near



Tablet

Input
Direct.
Gesture/OSK

Navigation
Panes & Slideouts

Posture
On-the-go
Lean back
Shared

Display
Hi-Rez
Medium,
Near



So what's common?

design principles

fundamental, universal ideas that underpin good design across different input methods, display capabilities and user posture

but the application of principles varies across

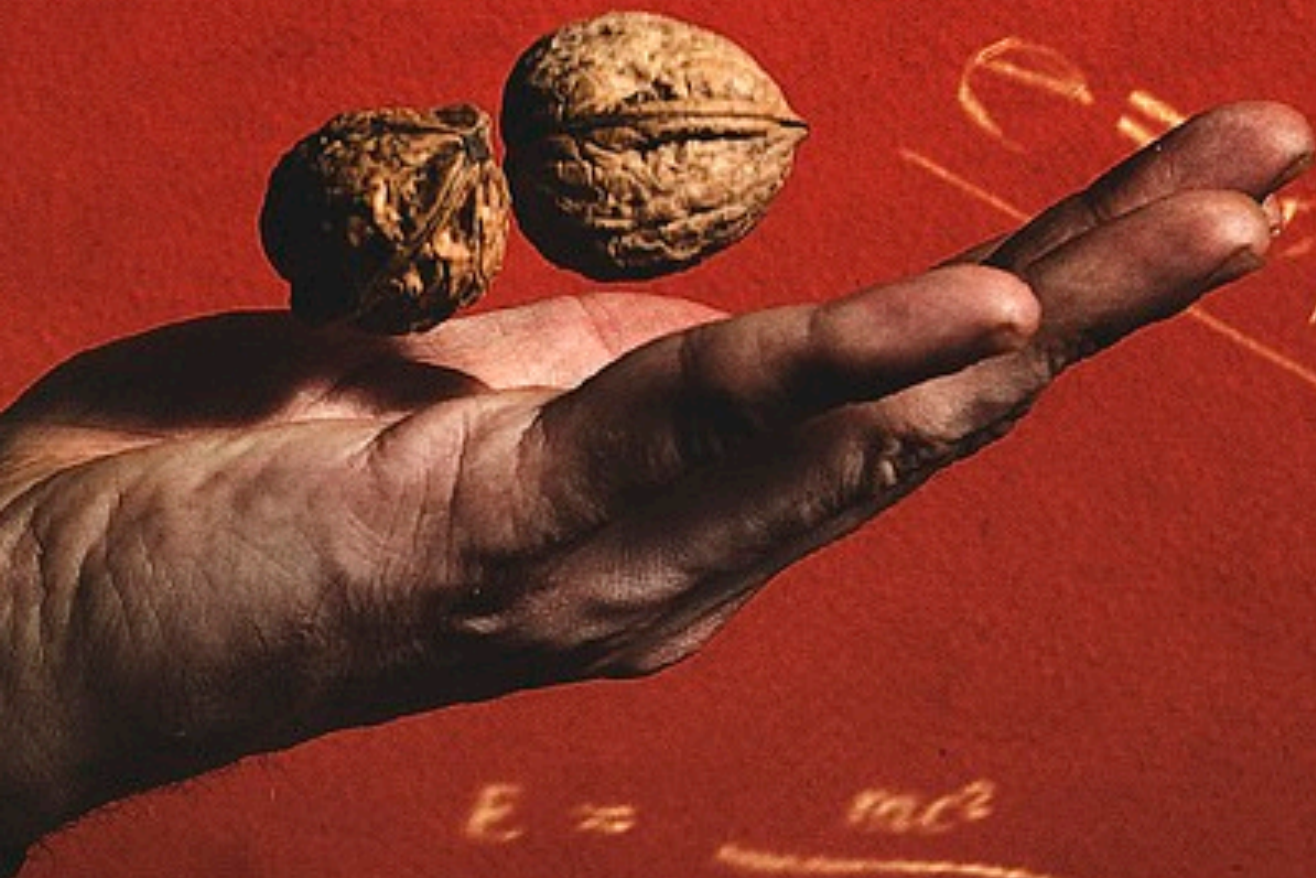
- **input**
- **posture**
- **navigation**
- **display**

Three Principles

Three Principles

common design principles for
multiple platform design

#1 Get Physical



$$E = \frac{mc^2}{\sqrt{1 - \frac{v^2}{c^2}}}$$

The Illusion of Physicality



The Illusion of Physicality



+



Design for Physicality

Design for Physicality

Whenever possible, add a realistic, physical dimension to your application.

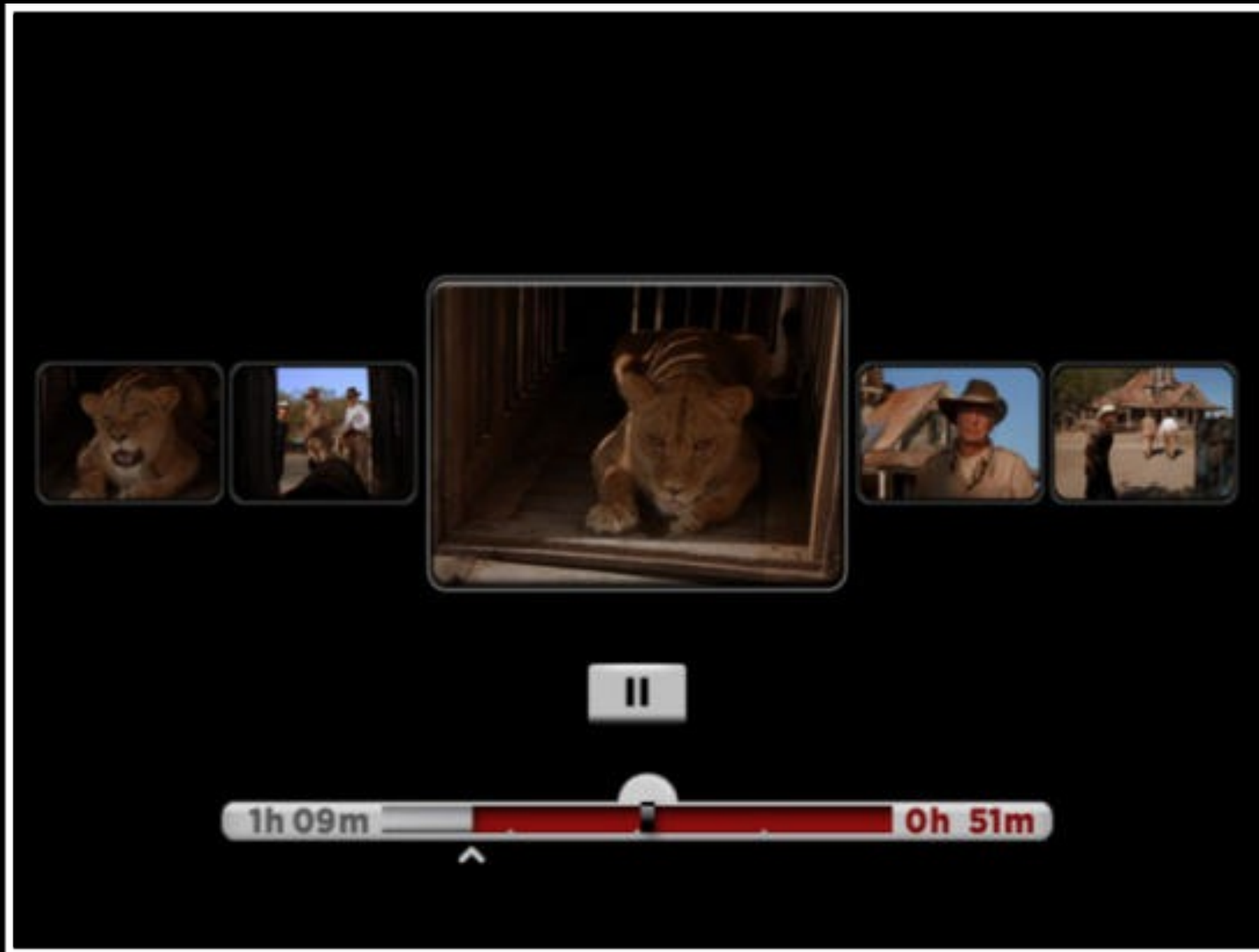
Design for Physicality

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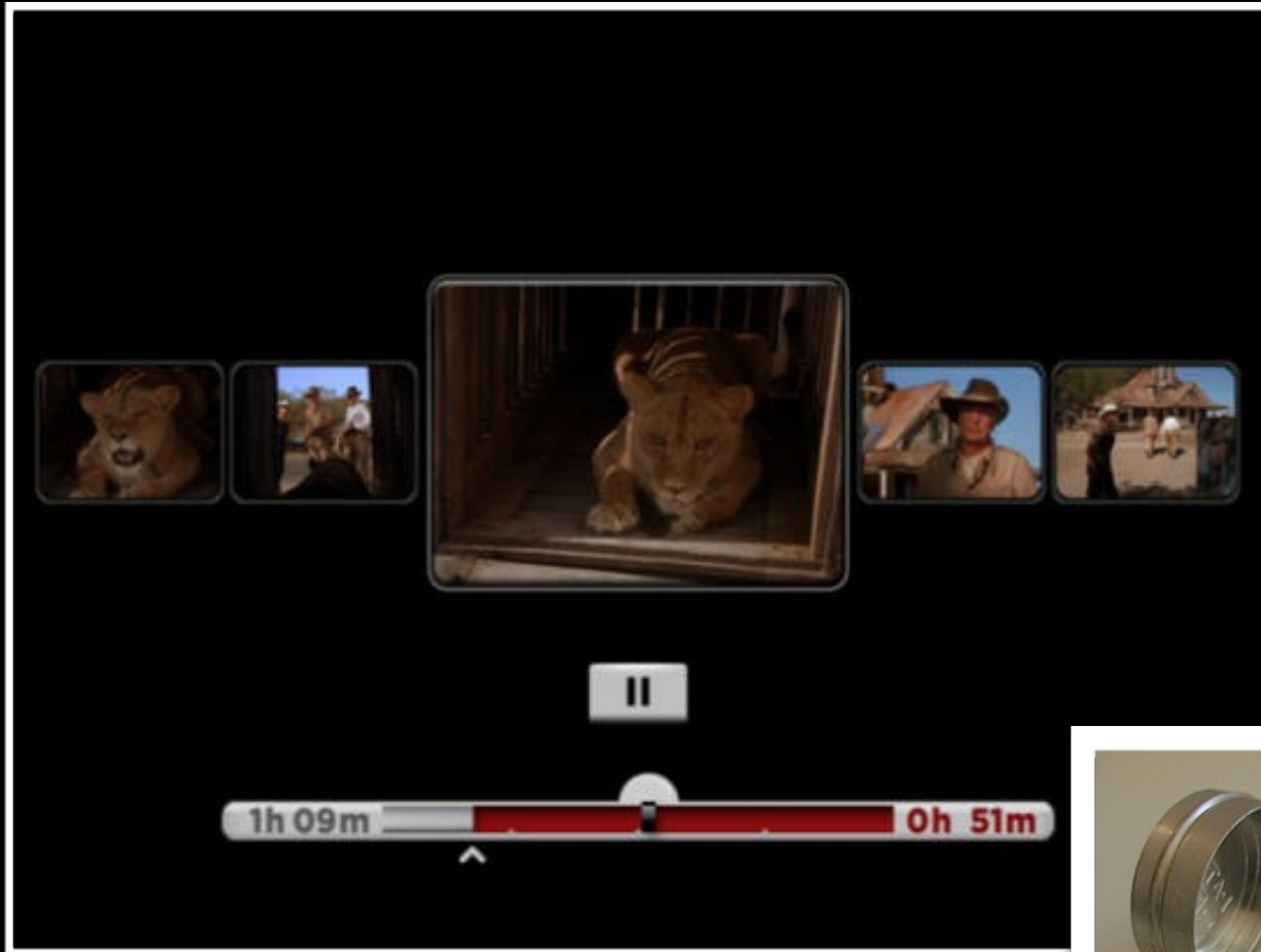
- Apple HIG

Use Metaphors
to Embody
Physicality

Physicality as Metaphor



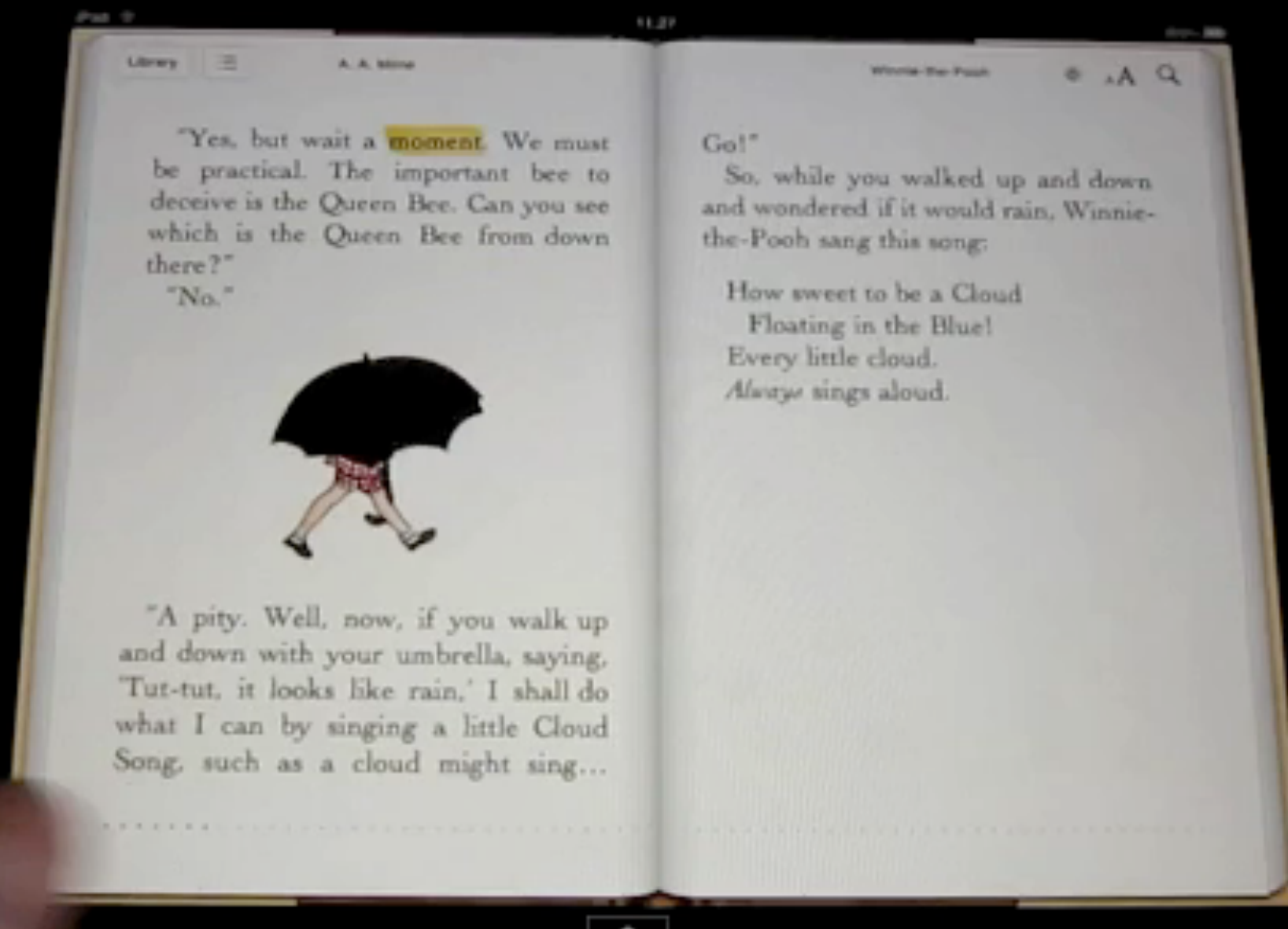
Physicality as Metaphor



Film Strip

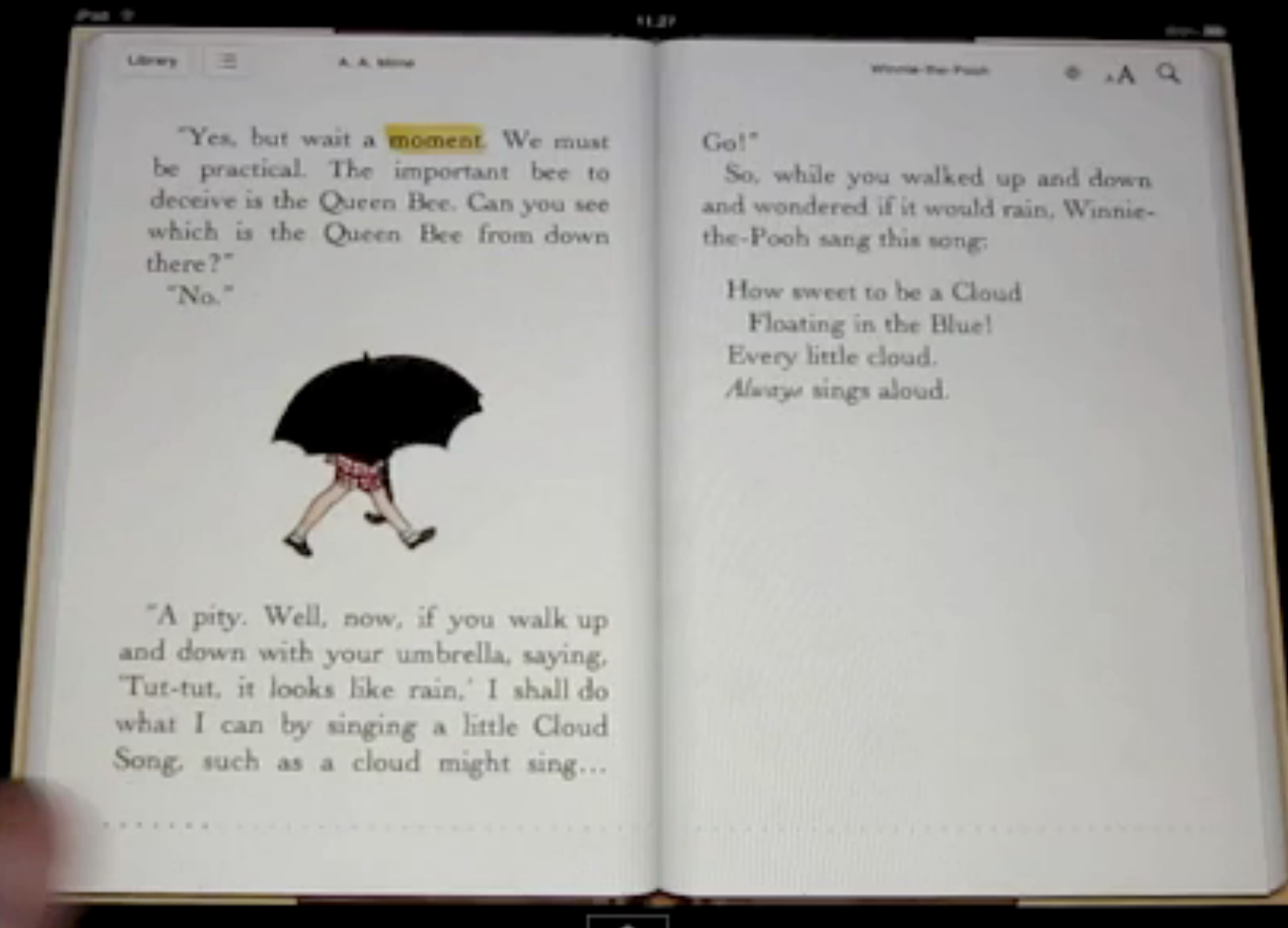


Physicality as Metaphor



Book

Physicality as Metaphor

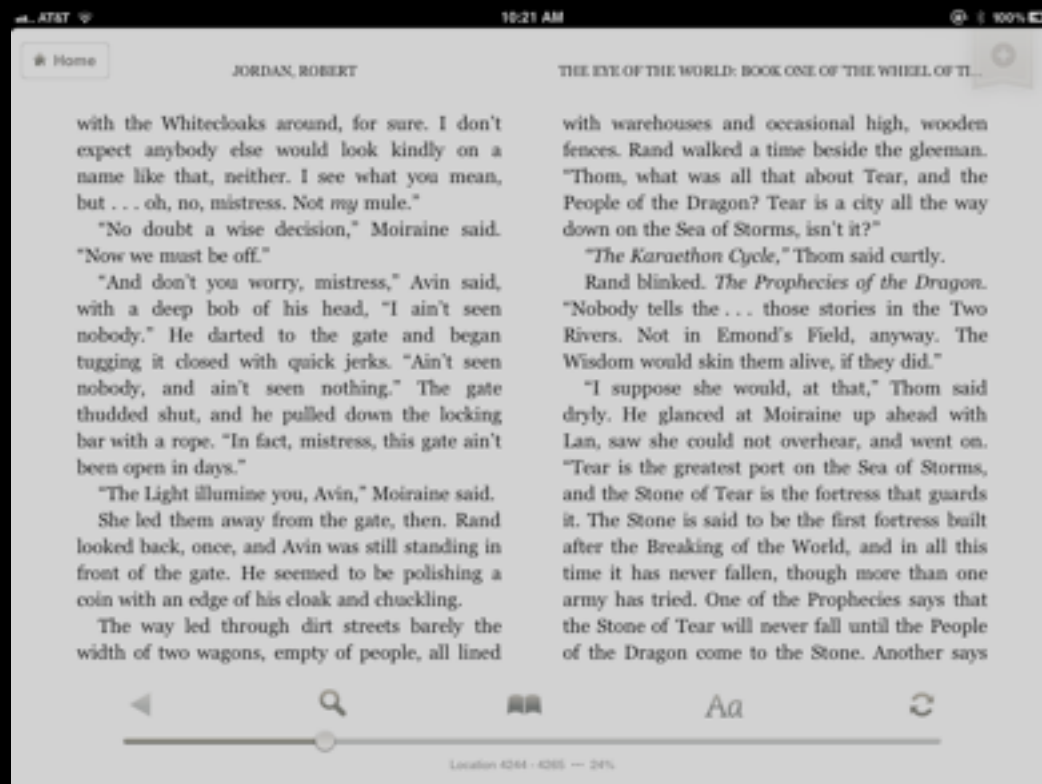


Book

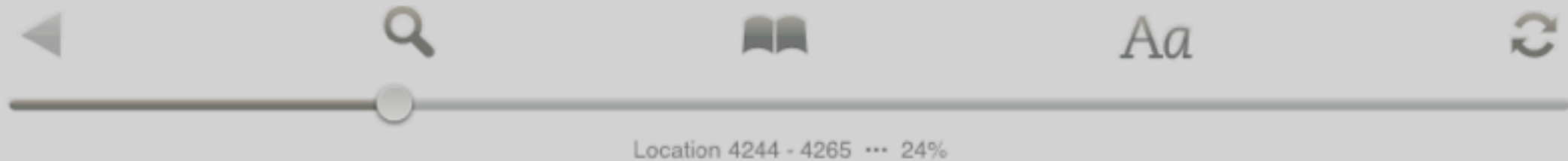
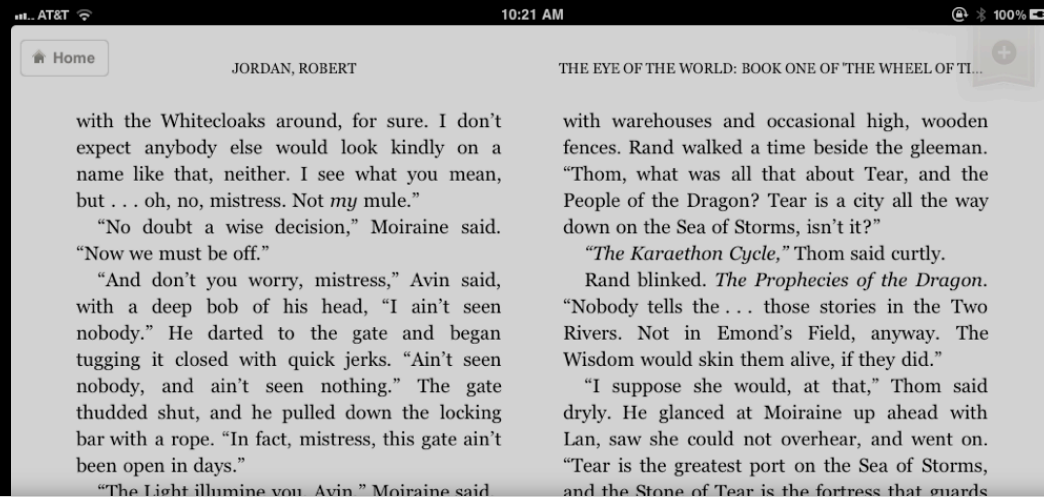
"Books have pages"

"Pages turn"

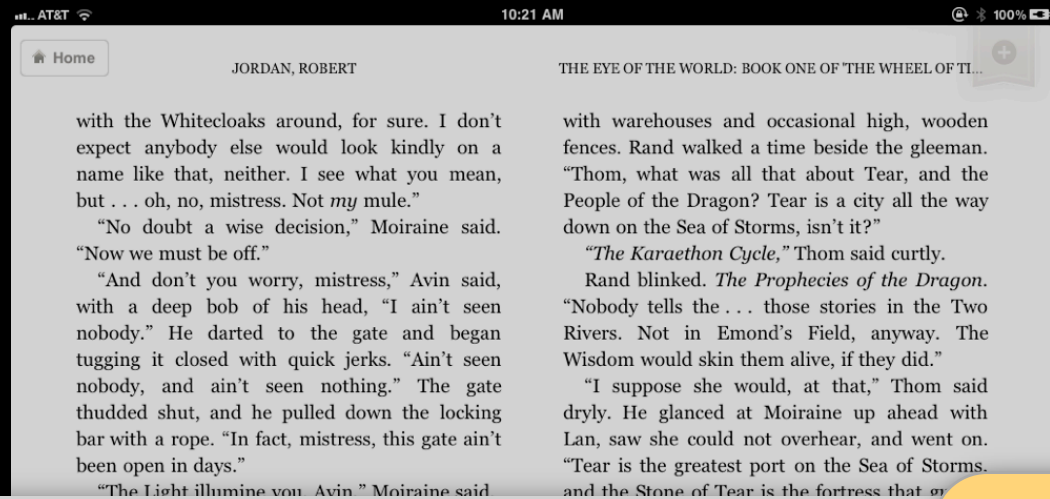
Anti-Pattern: Broken Metaphor



Anti-Pattern: Broken Metaphor



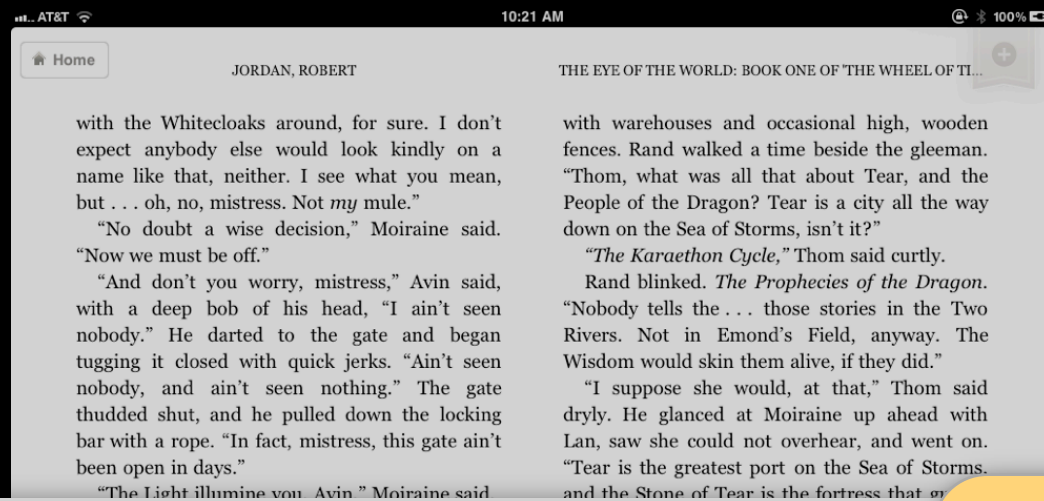
Anti-Pattern: Broken Metaphor



Location??

Location 4244 - 4265 ... 24%

Anti-Pattern: Broken Metaphor

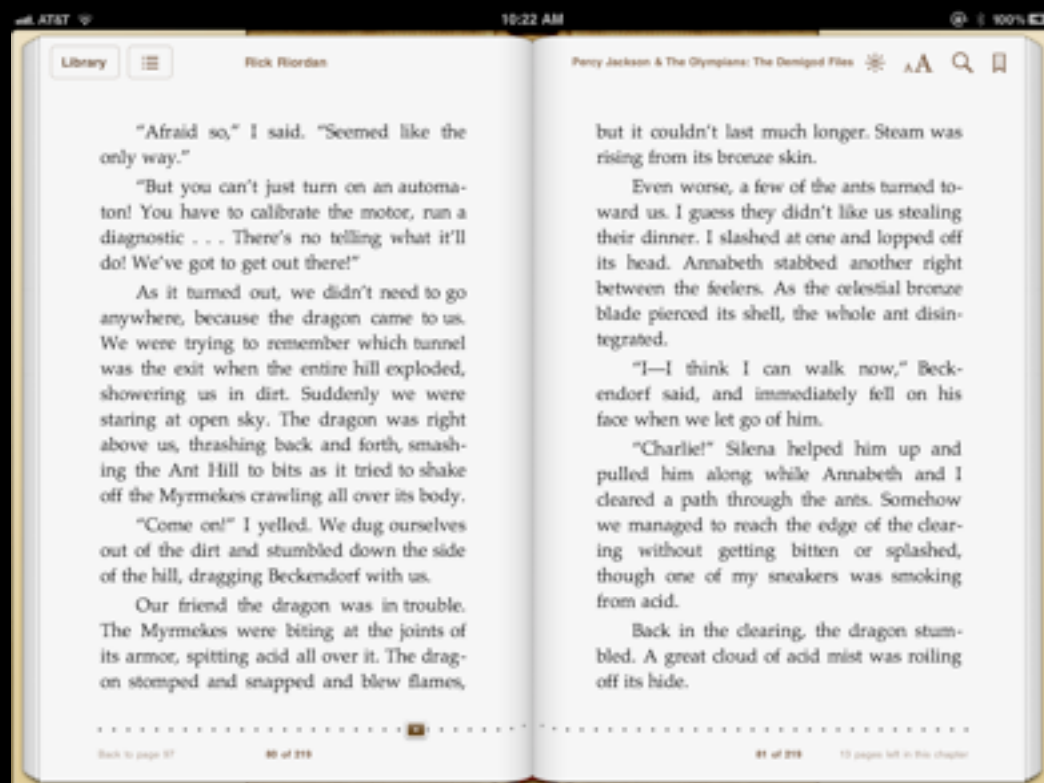


Location??

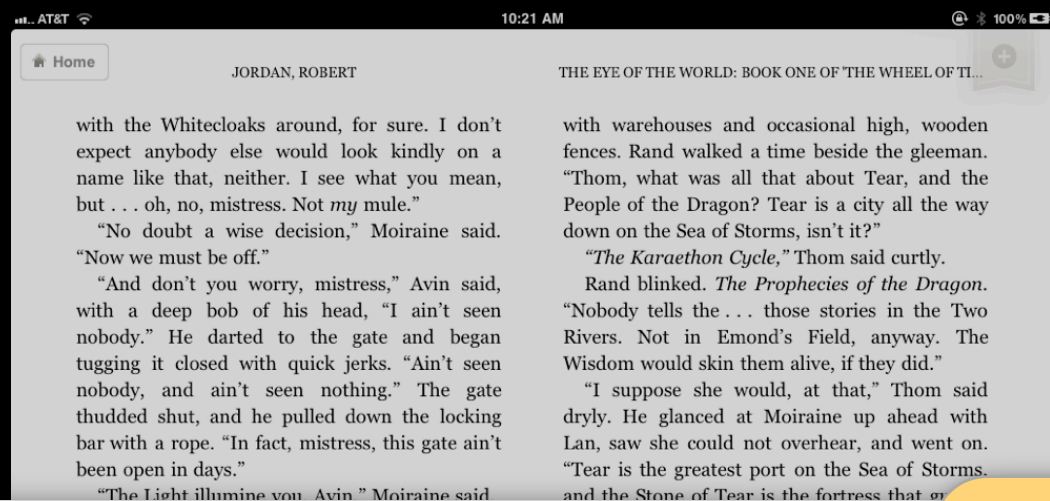
Aa



Location 4244 - 4265 ... 24%



Anti-Pattern: Broken Metaphor

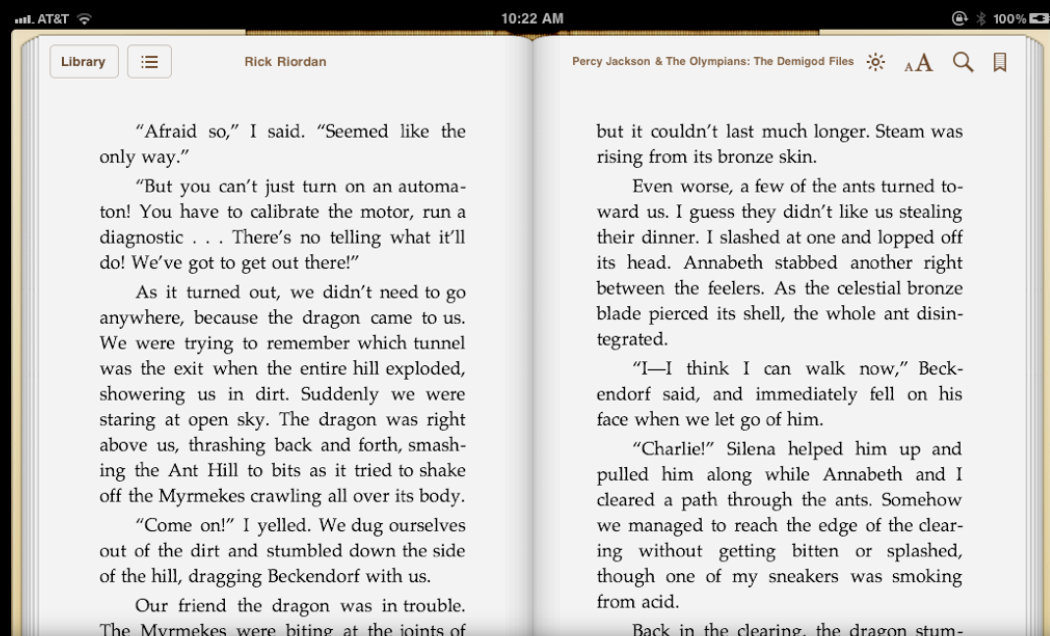


Location??

Aa



Location 4244 - 4265 ... 24%



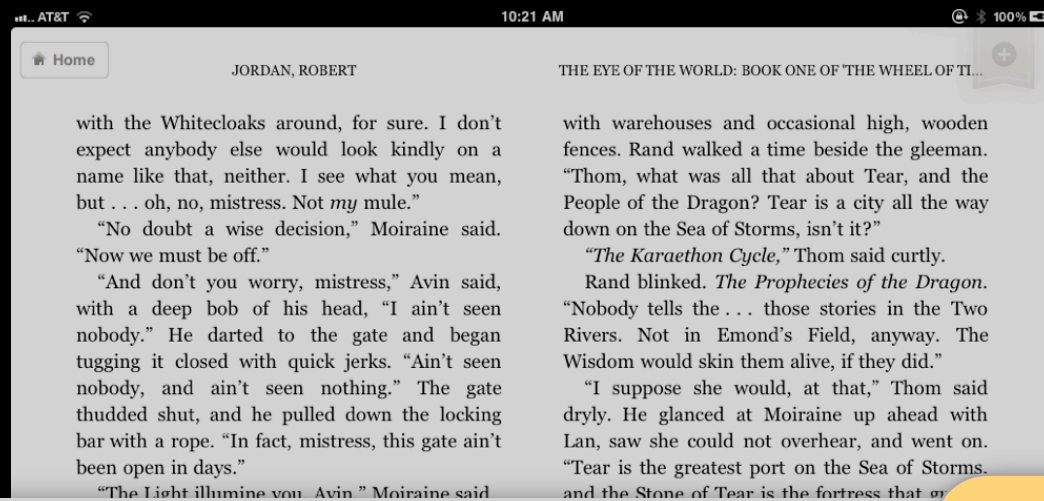
Back to page 97

80 of 219

81 of 219

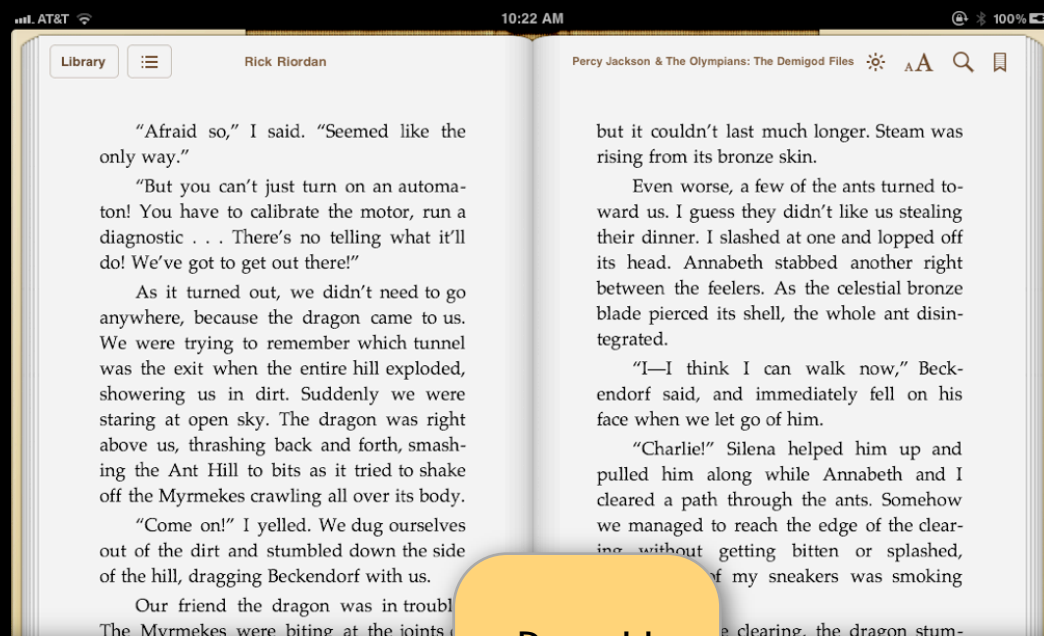
13 pages left in this chapter

Anti-Pattern: Broken Metaphor



Location??

Location 4244 - 4265 ... 24%



Page!!

"Books have pages"

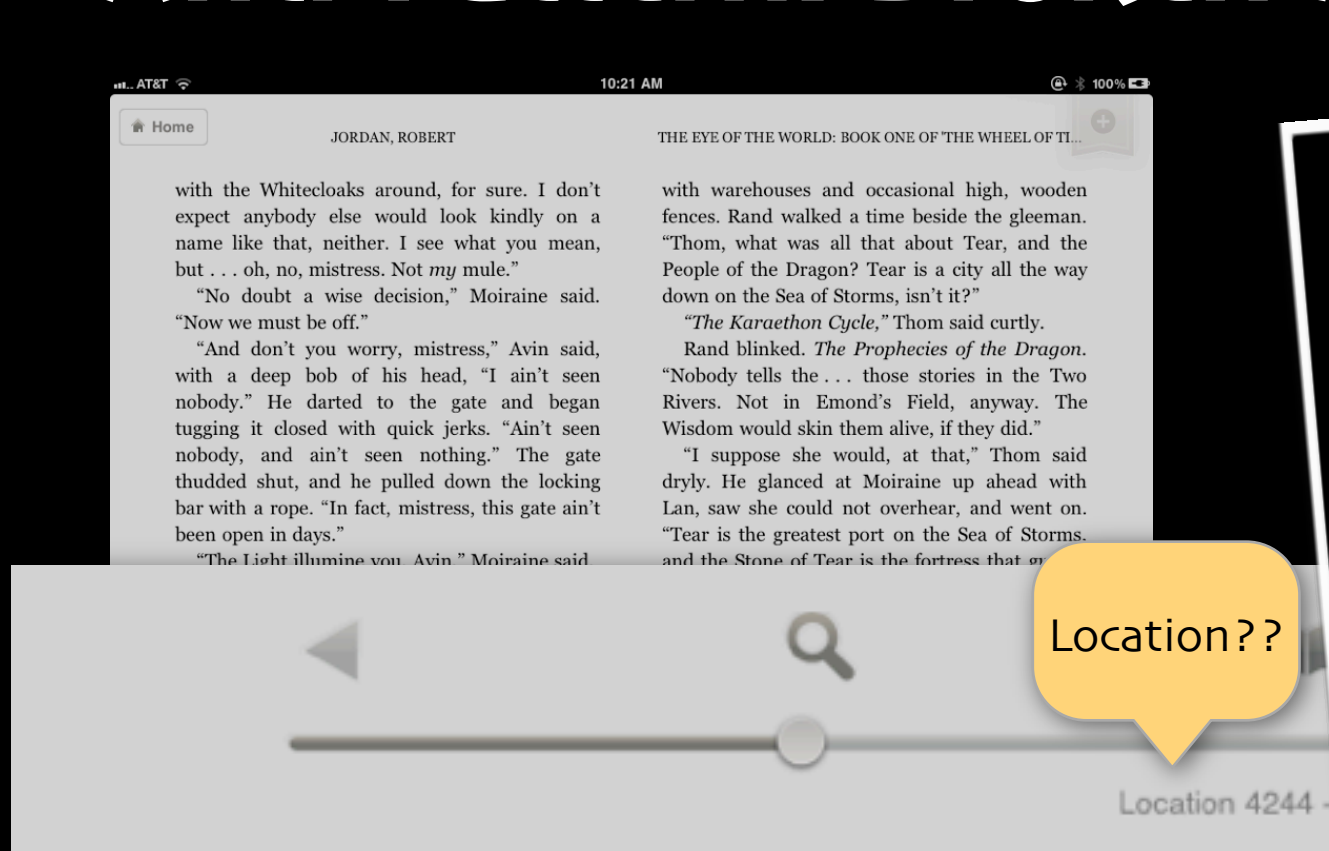
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80 of 219

81 of 219

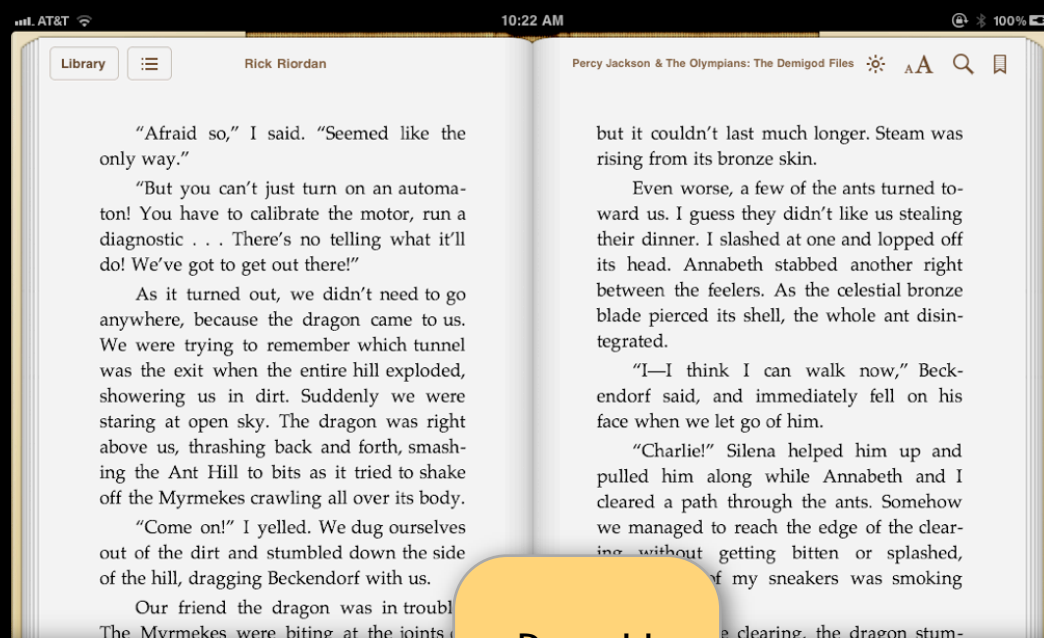
13 pages left in this chapter

Anti-Pattern: Broken Metaphor



Don't break the metaphor for the underlying implementation model.

The user's mental model is the experience cushion.



"Books have pages"

Break the Metaphor with Magic

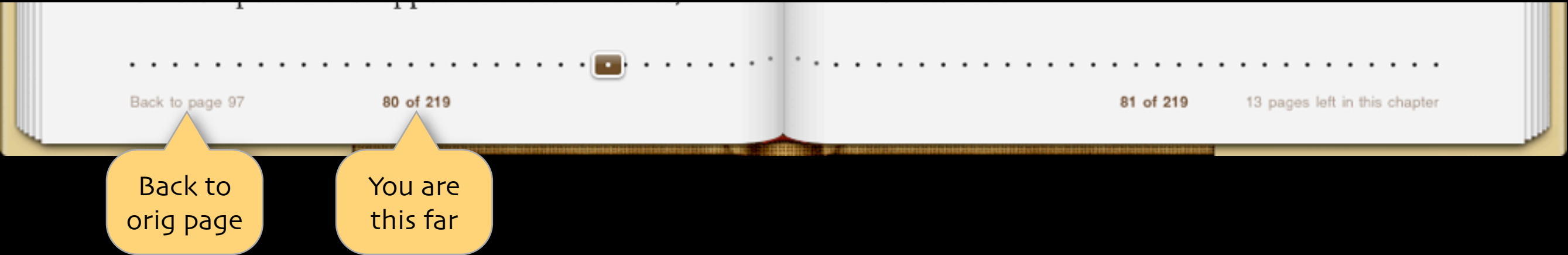
Break the Metaphor with Magic



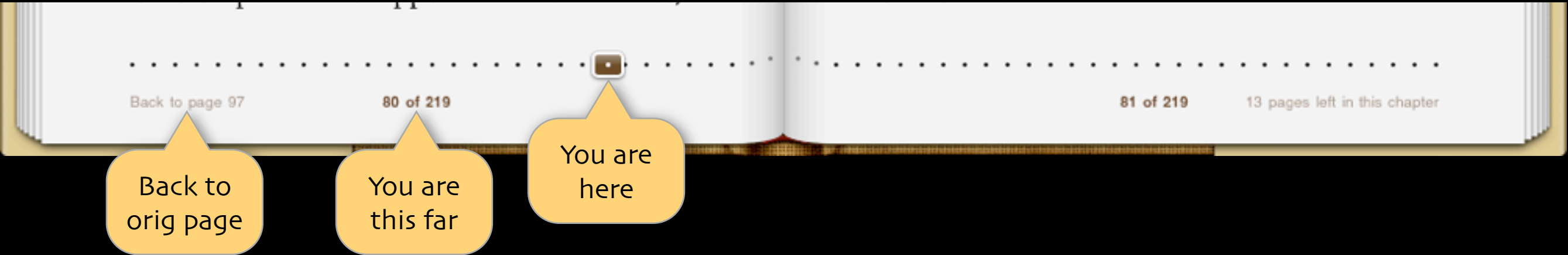
Break the Metaphor with Magic



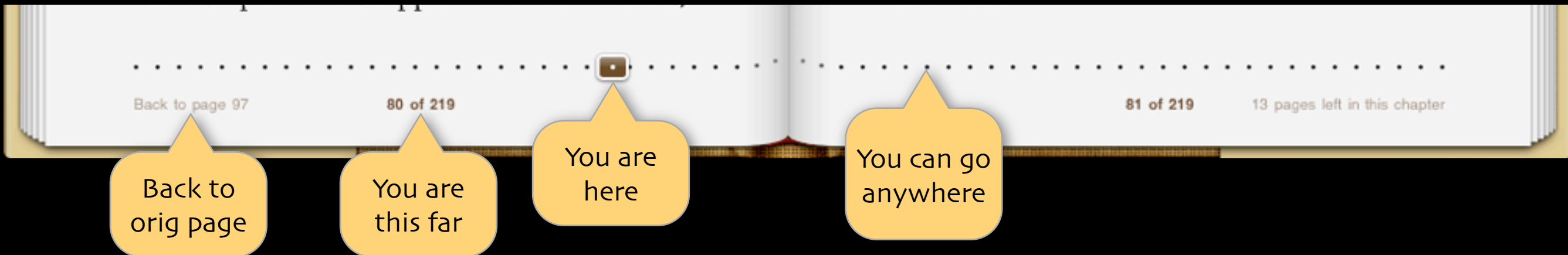
Break the Metaphor with Magic



Break the Metaphor with Magic



Break the Metaphor with Magic



Break the Metaphor with Magic

Back to page 97

Back to
orig page

80 of 219

You are
this far

You are
here

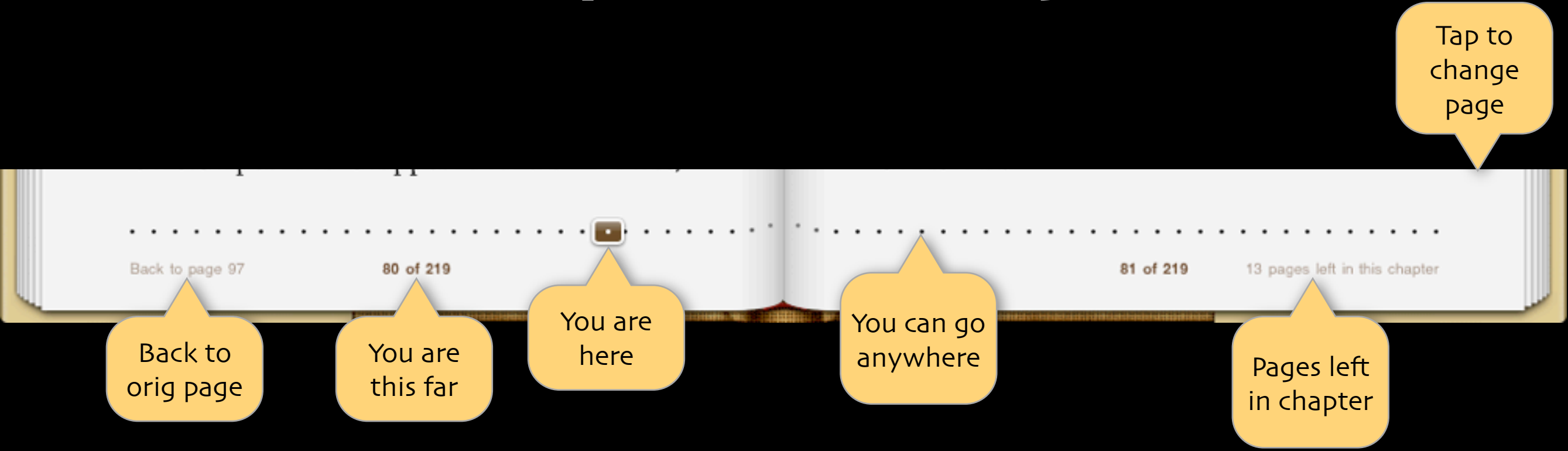
You can go
anywhere

81 of 219

13 pages left in this chapter

Pages left
in chapter

Break the Metaphor with Magic



Break the Metaphor with Magic

Tap to
change
page

Back to page 97

80 of 219

You are
here

You can go
anywhere

81 of 219

13 pages left in this chapter

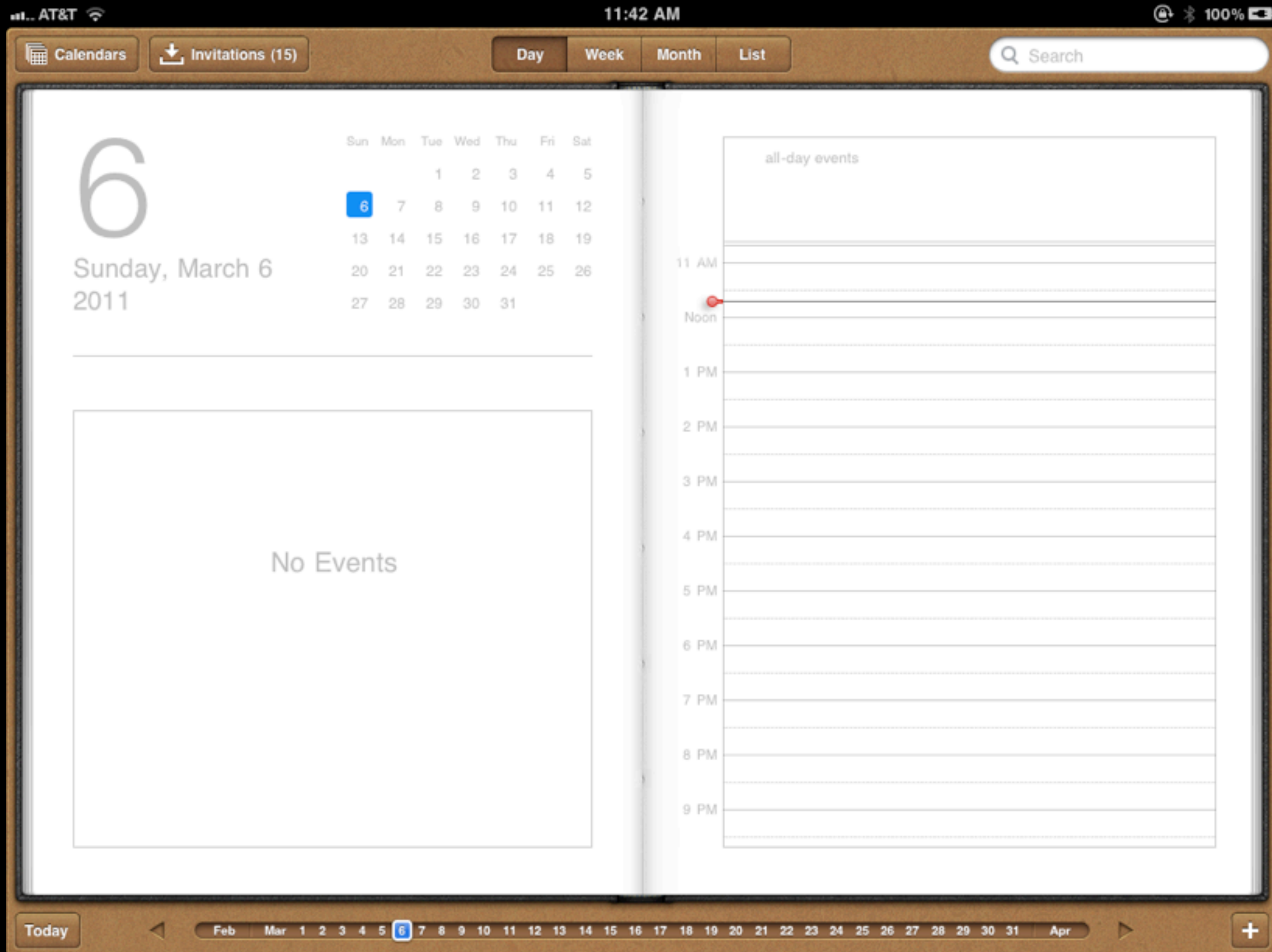
Back to
orig page

You are
this far

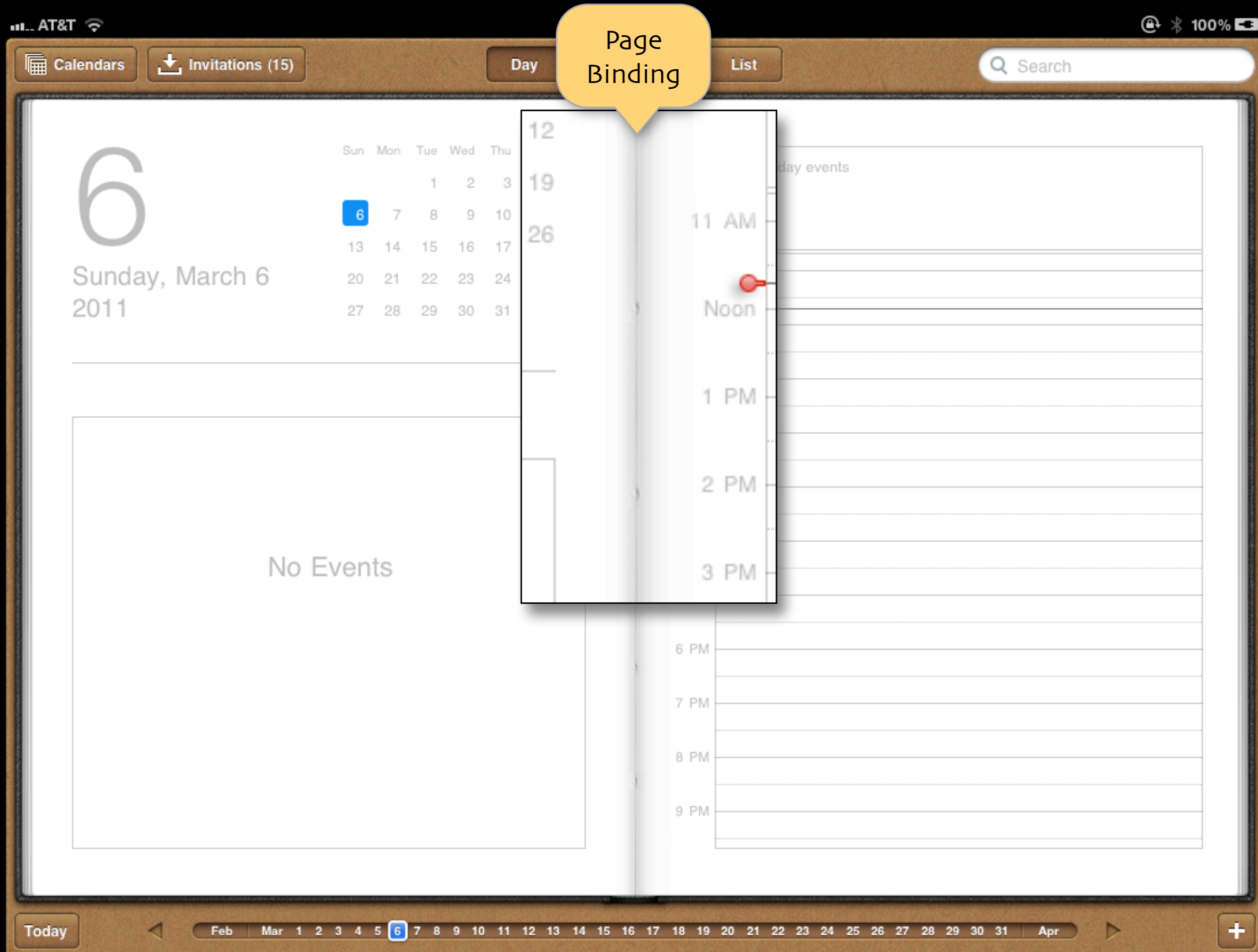
Pages left
in chapter

Strict physicality is hard work.
Use magic to simplify the real
world.

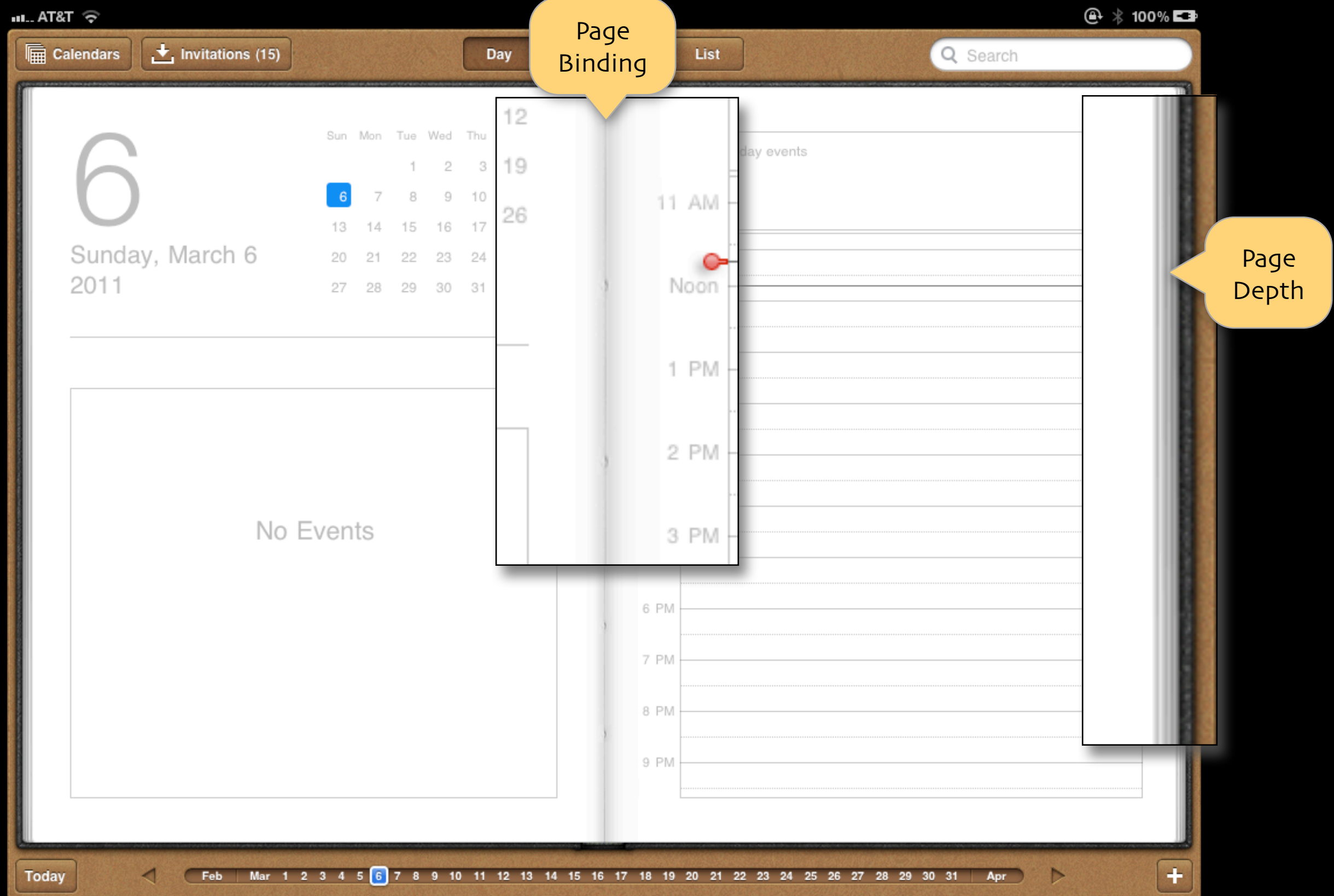
To Flick or not to Flick



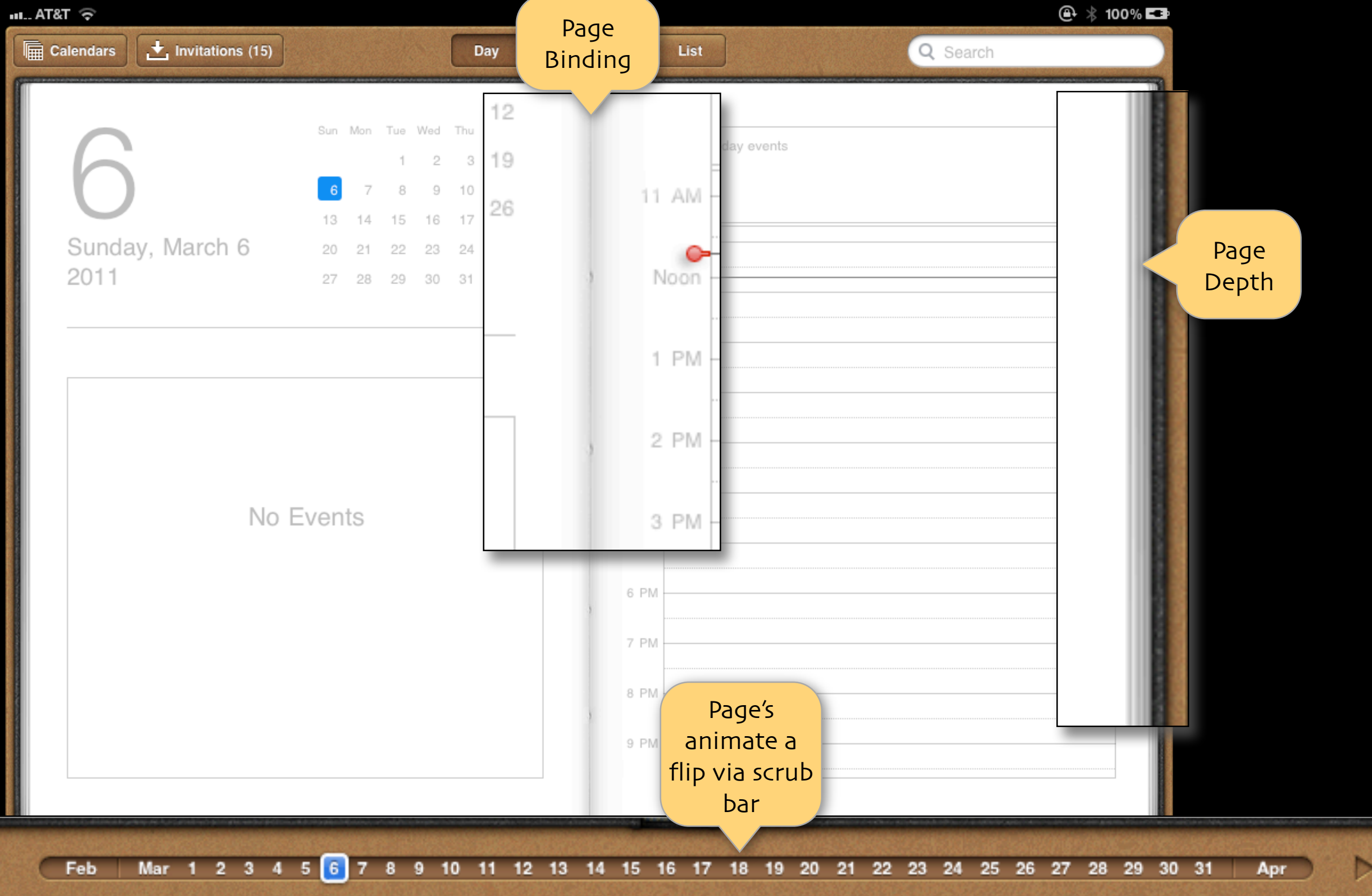
To Flick or not to Flick



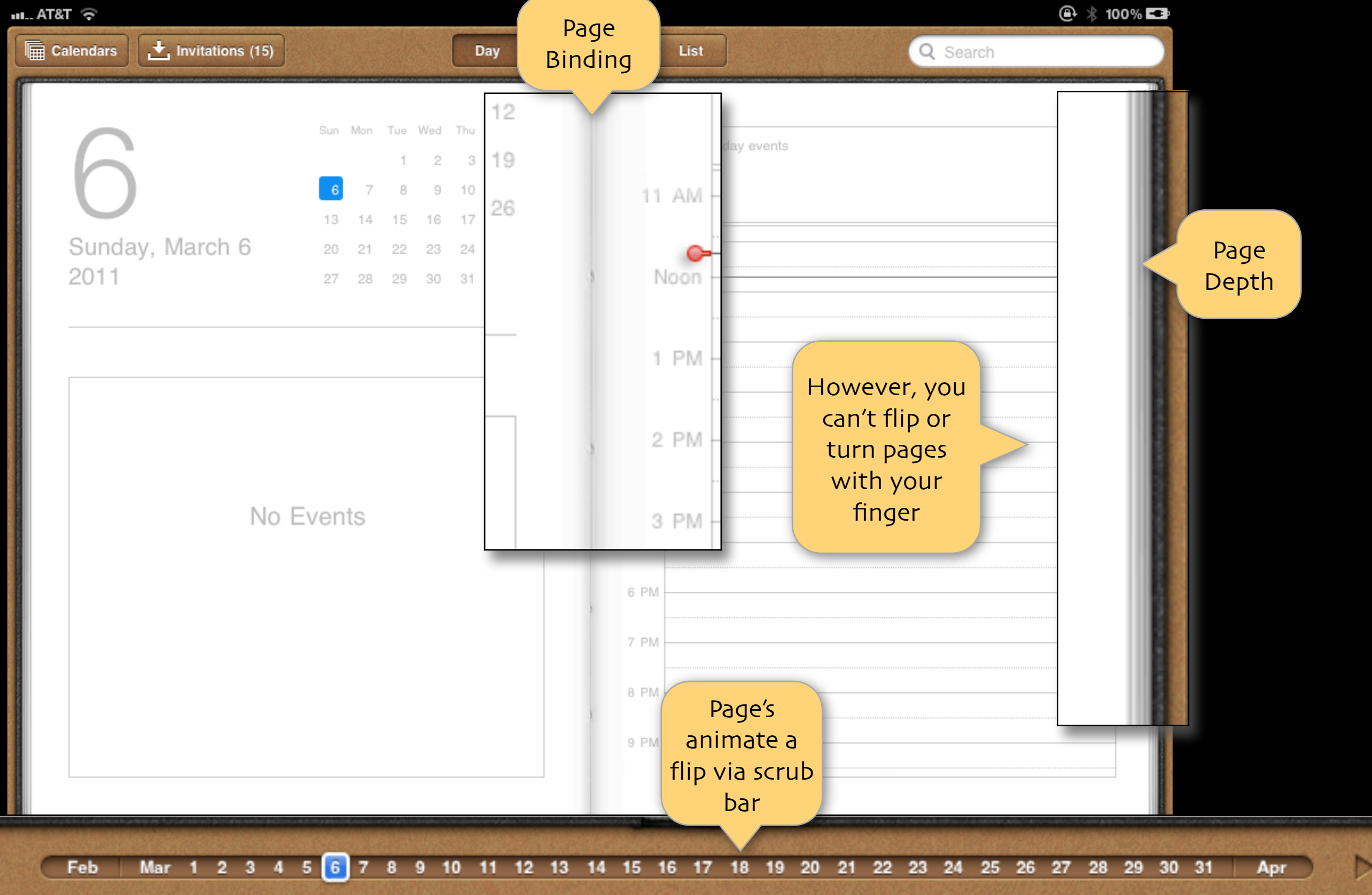
To Flick or not to Flick



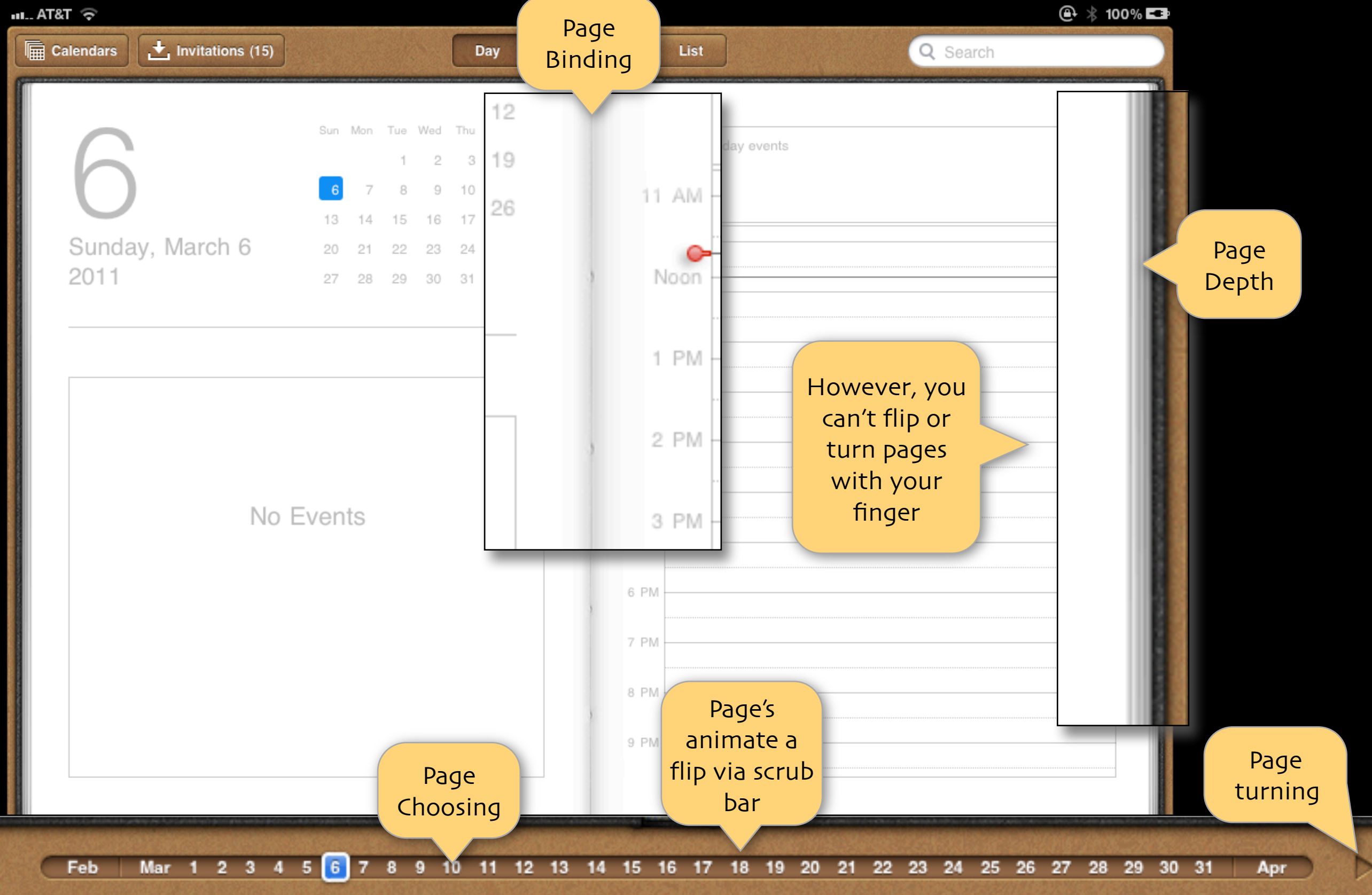
To Flick or not to Flick



To Flick or not to Flick



To Flick or not to Flick



Use Directness
to Simulate
Physicality

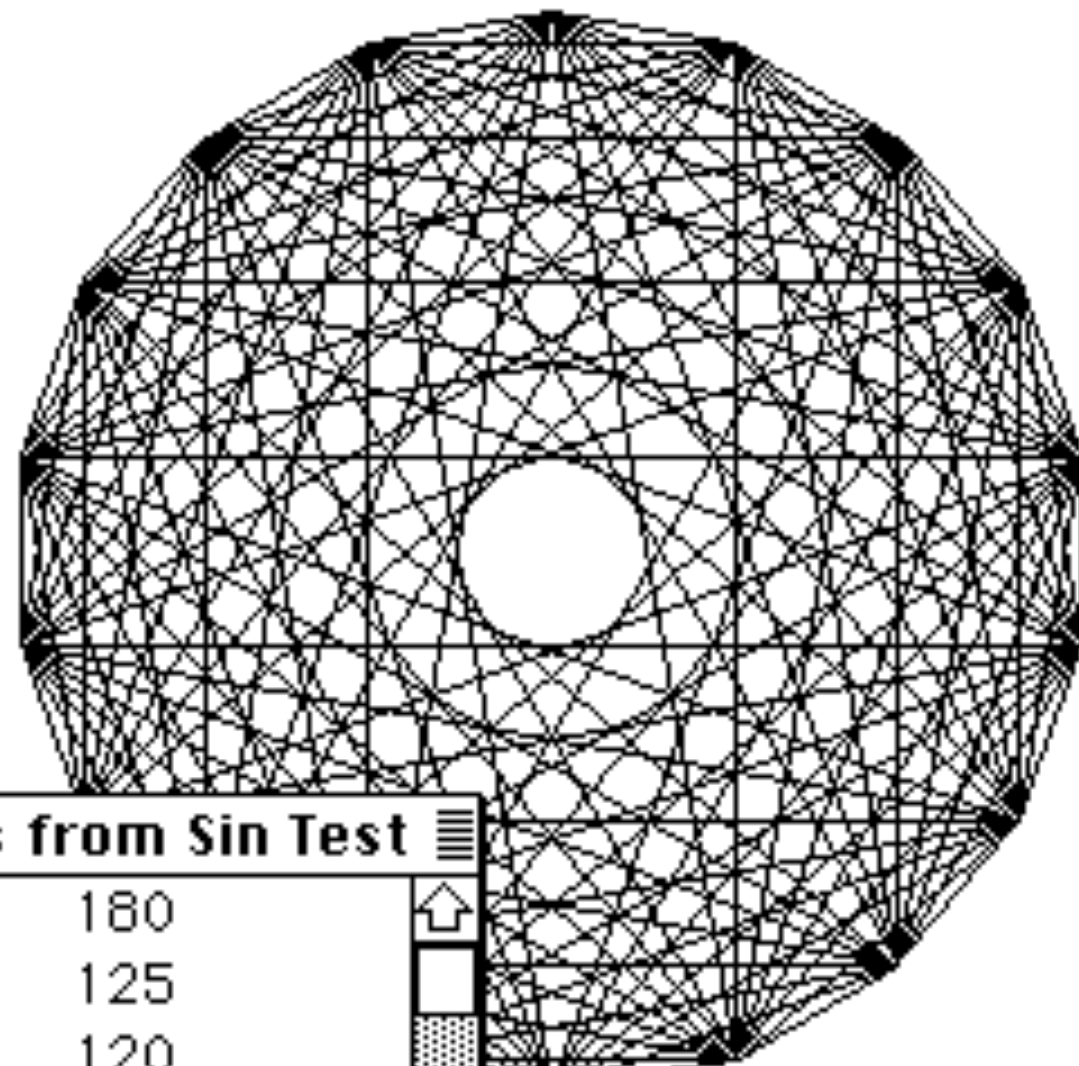
Text of Sin Test

```

for a = 1 to p
  an =(a/f)* (3.1415/3
  x%(a) = x0 + r*sin(an)
  y%(a) = y0+r*cos(an)
next a
dlim = p/2-1
for d = 1 to dlim
  for j = 1 to p
    j1 =j + d
    if j1 > p then j1
    plot x%(j),y%(j);x
  next j
next d
next f
loop
end

```

Sin Test



Variables from Sin Test	
X0	180
Y0	125
R	120
F	3
P	18

b	18
e	3

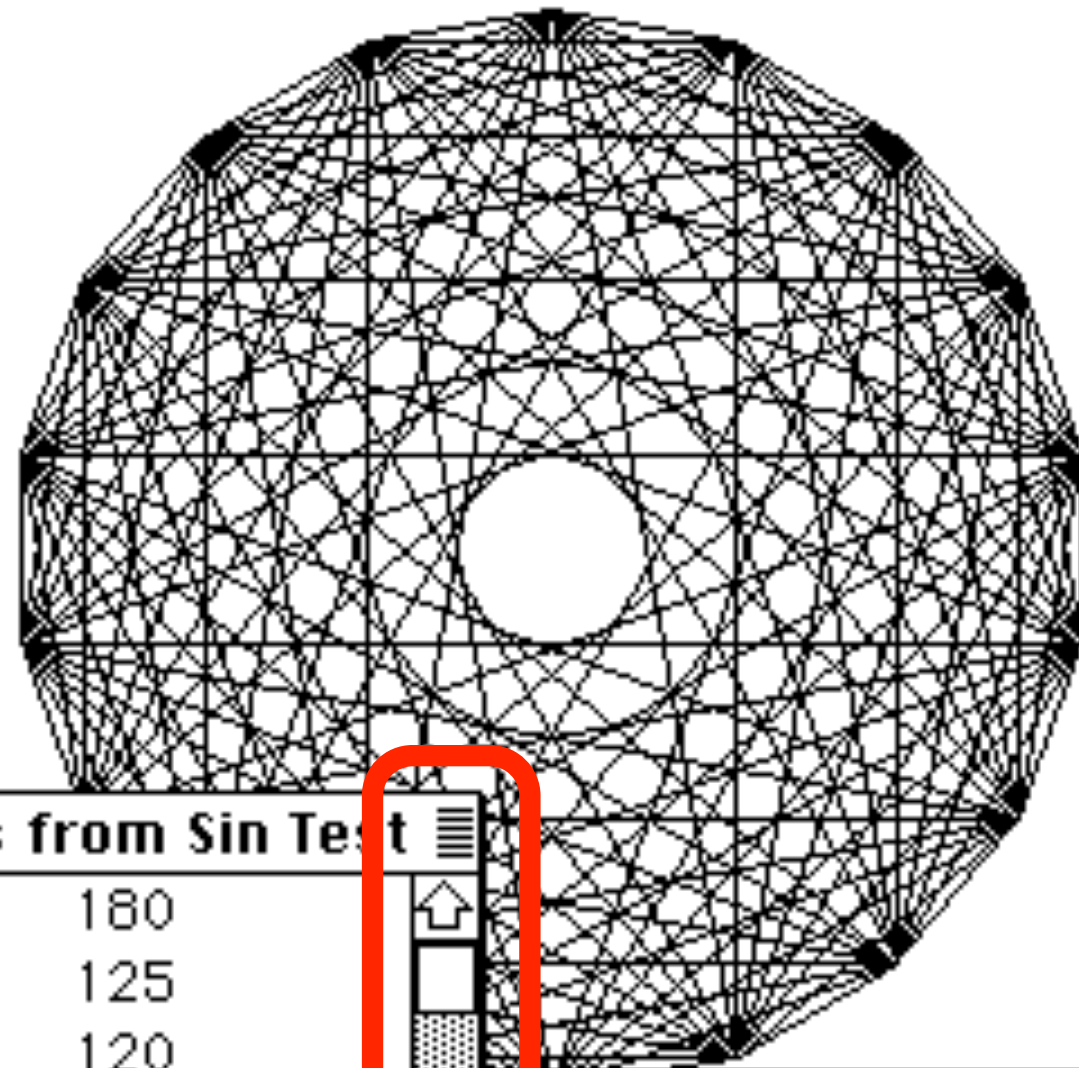
Text of Sin Test

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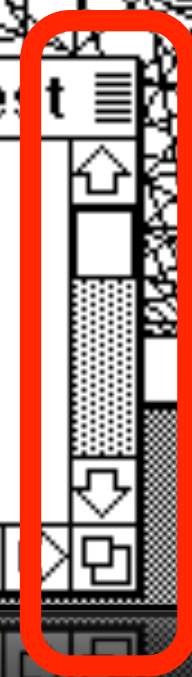
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  next j
next d
next f
loop
end

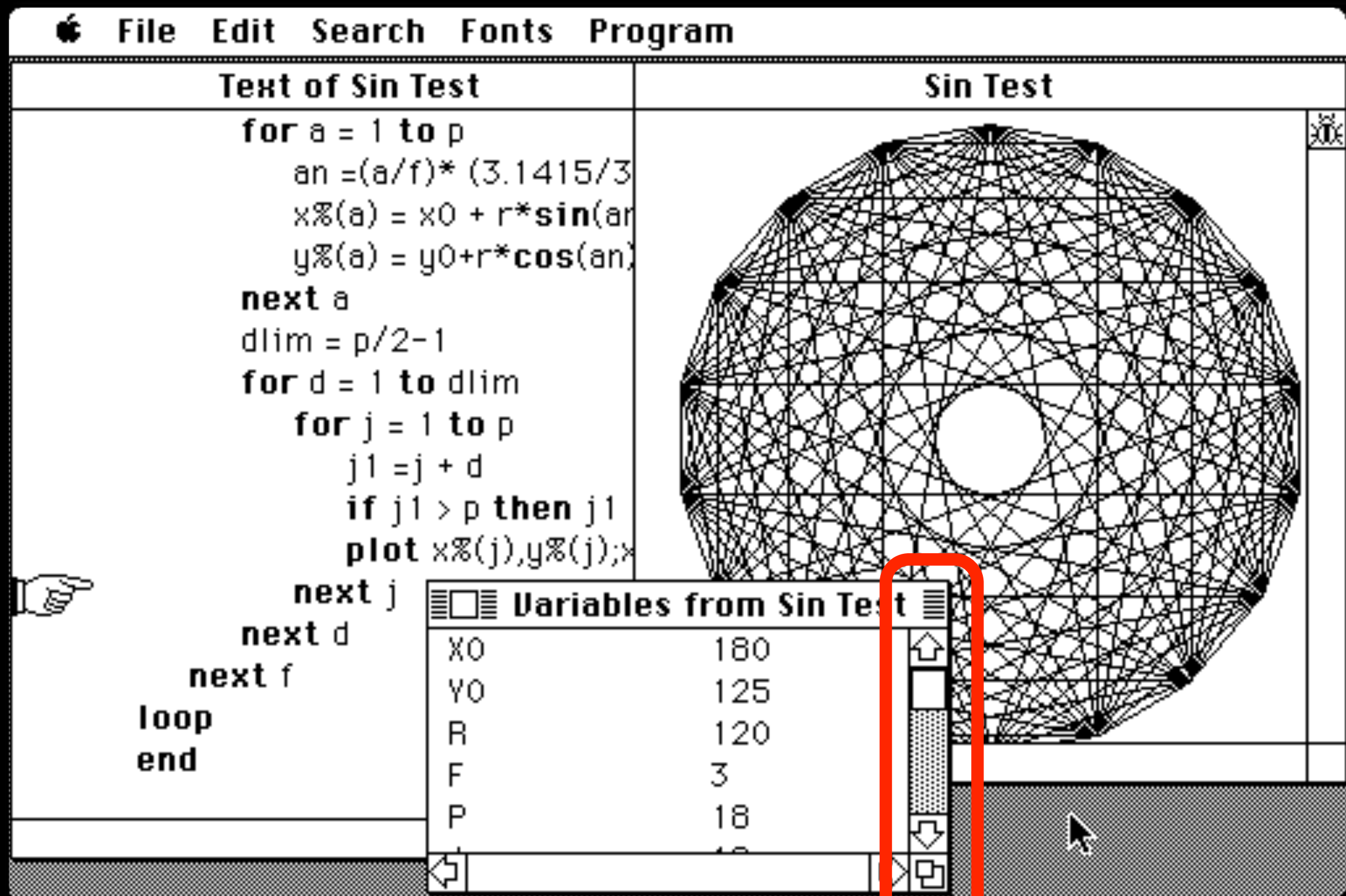
```

Sin Test



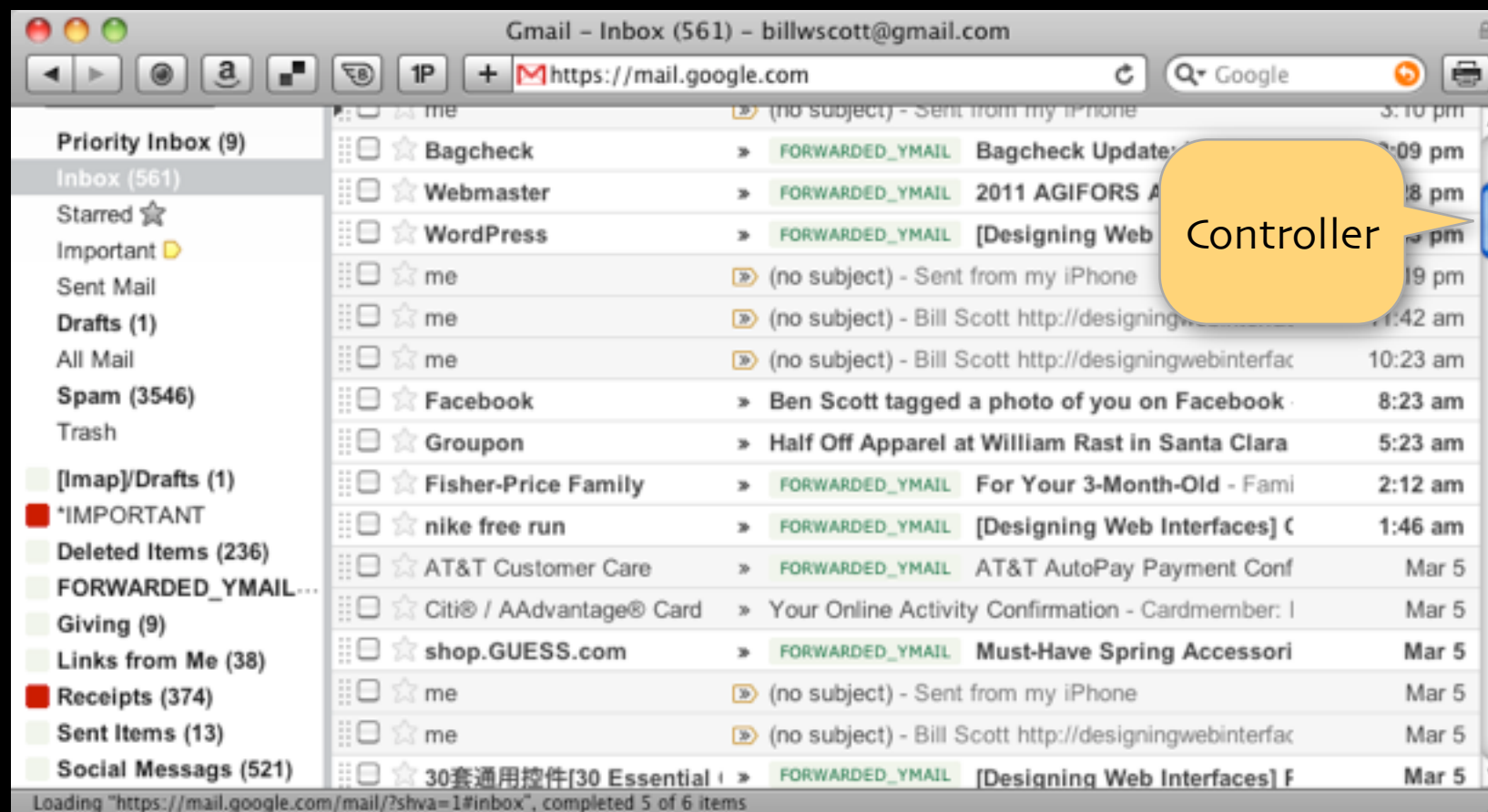
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X0	180
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F	3
P	18





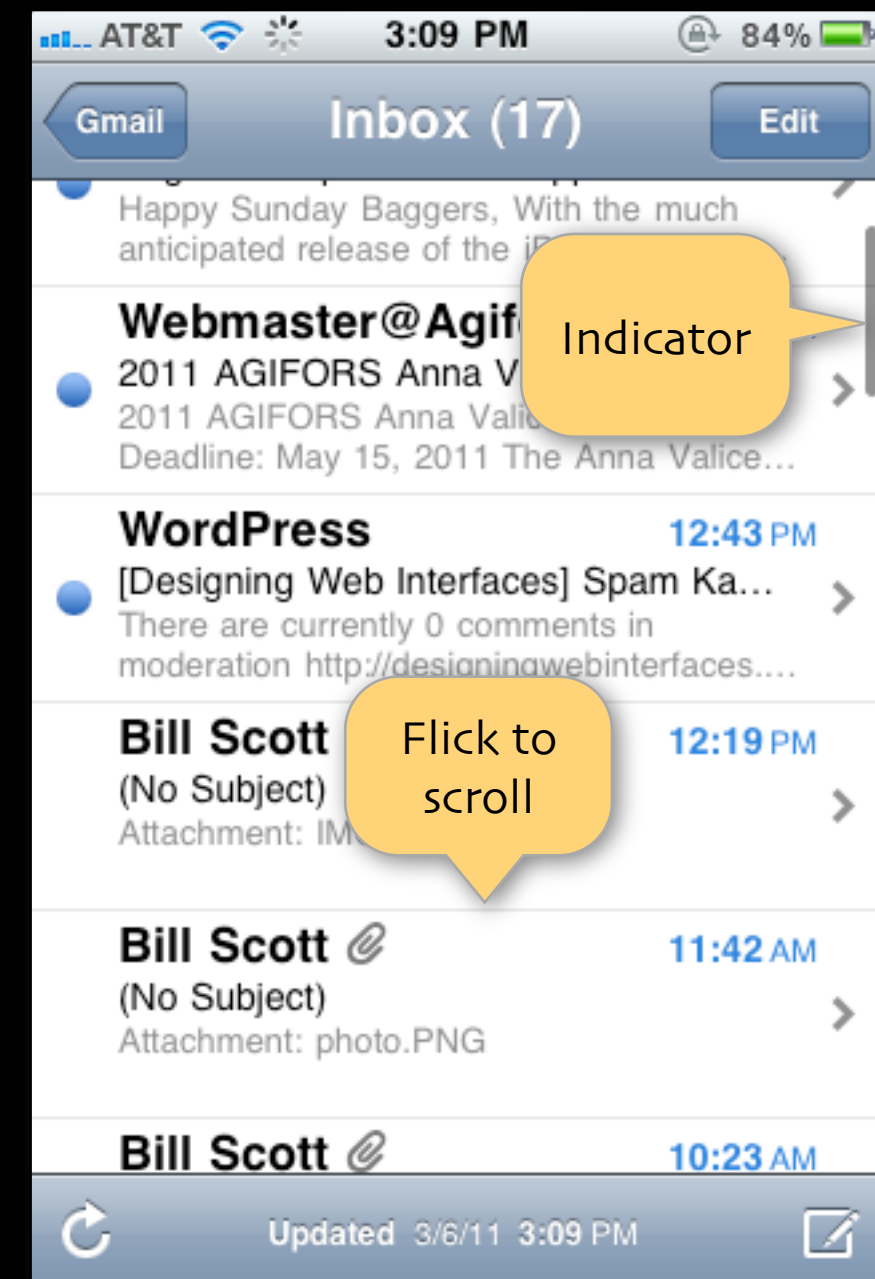
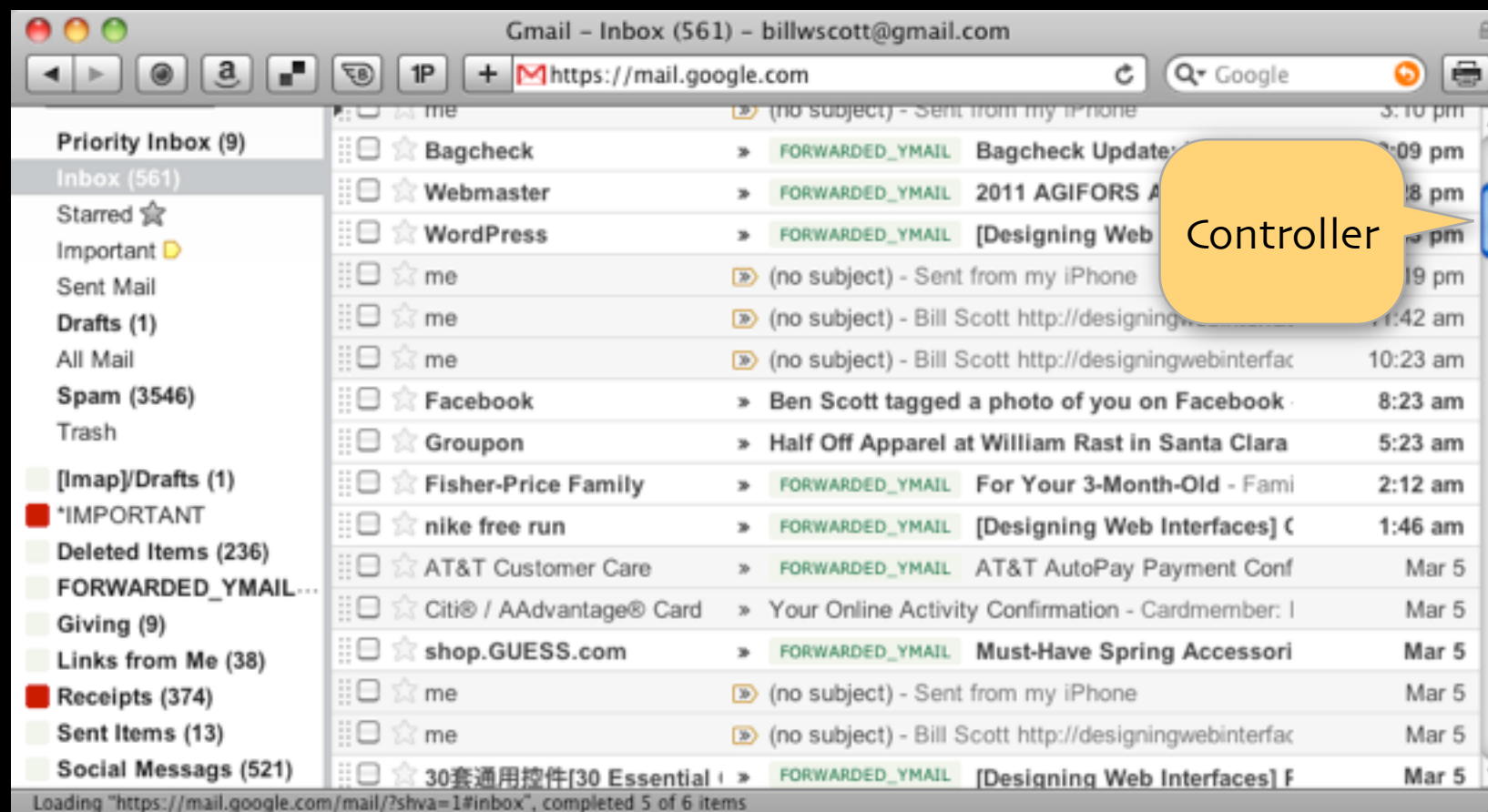
in 1984, this was physicality - the scrollbar

Scrollbar Evolution



Scrollbar Evolution

From **Controller** to **Indicator**
Content is scrolled instead of scrollbar



Thumbwheel is an evolution as well

It must feel real



It must feel real



Make sure event handling is consistent

It must feel real



Make sure event handling is consistent

Remember fingers are fat. Real estate is limited


It must feel real



Make sure event handling is consistent


Remember fingers are fat. Real estate is limited

Anti-Pattern: Mismatched Metaphor



Home Locator

SEARCH AREA



Select an Area

FILTERS

Price Range: 75K - 5M


Bedrooms: Any Bedrooms: 2 or more

Minimum Footage: 500

Amenities: Pool Walk-in Closets Laundry Fireplace

Search Favorites

Price	Sq. Ft.	Bedrooms	Baths	Stories
\$488,000	968	3	1	1
\$215,000	7760	2	1	1
\$270,000	912	2	2	2
\$390,000	953	2	2	1
\$345,000	1099	2	4	1
\$5,000,000	3459	6	3	1
\$171,000	1335	4	2	2
\$2,390,000	2680	3	6	2
\$821,000	1318	3	3	1
\$884,000	1439	3	3	2
\$715,000	1159	3	2	1
\$617,000	1119	2	2	1
\$981,000	1379	4	3	1
\$450,000	1019	2	2	1
\$435,000	1100	4	2	2



Property Information Pictures

DESP. VENDOR FRUSTRATED HERE

You have 1 properties in your favorites

Anti-Pattern: Mismatched Metaphor

The screenshot shows a web application titled "Home Locator" with a search interface. The interface includes a search bar, a map of North America, and a table of properties. The table has columns for Price, Sq. Ft., Bedrooms, Baths, and Stories. A red heart icon is next to the first row in the table. Below the table, there is a blue button that says "DEEP VEEN FRUEBTER HERE" and "You have 1 properties in your favorites".

Home Locator

SEARCH HERE

North America

— Select an Area —

FILTERS

Price Range: 75K - 5M

Bedrooms: 1 - 5

Baths: 1 - 5

Stories: 1 - 5

Map: 75K - 5M

Price	Sq. Ft.	Bedrooms	Baths	Stories
\$488,000	968	3	1	1
\$215,000	778	2	1	1
\$270,000	912	2	2	2
\$390,000	953	2	2	1
\$345,000	1099	2	4	1
\$5,000,000	3459	6	3	1
\$171,000	1335	4	2	2
\$2,190,000	2689	3	4	2
\$121,000	1319	3	3	1
\$184,000	1439	3	3	2
\$715,000	1159	3	2	1
\$617,000	1119	2	2	1
\$981,000	1379	4	3	1
\$450,000	1919	2	2	1

DEEP VEEN FRUEBTER HERE

You have 1 properties in your favorites

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The screenshot shows a web application titled "Home Locator" with a search interface. The interface includes a search bar, a map of North America, and a table of properties. The table has columns for Price, Sq. Ft., Bedrooms, Baths, and Stories. A red heart icon is next to the first two rows of the table, indicating they are favorites. A blue banner at the bottom of the table says "DESP. VERN FAVORITEN HIER" and "You have 2 properties in your favorites".

Home Locator

SEARCH HERE

North America

— Select an Area —

FILTERS

Price Range: 75K - 5M

Bedrooms: 1 - 5

Baths: 1 - 5

Stories: 1 - 5

Minimum Footage: 500

Amenities: Pool, Walk-In Closets, Laundry, Fireplace

Price	Sq. Ft.	Bedrooms	Baths	Stories
\$488,000	968	3	1	1
\$215,000	778	2	1	1
\$270,000	912	2	2	2
\$390,000	953	2	2	1
\$345,000	1099	2	4	1
\$5,000,000	3459	6	3	1
\$921,000	1319	3	3	1
\$86,000	1459	3	3	2
\$718,000	1189	3	2	1
\$617,000	1119	2	2	1
\$861,000	1379	4	3	1
\$490,000	1019	2	2	1
\$931,000	1339	4	2	2
\$931,000	1332	4	2	2

DESP. VERN FAVORITEN HIER
You have 2 properties in your favorites

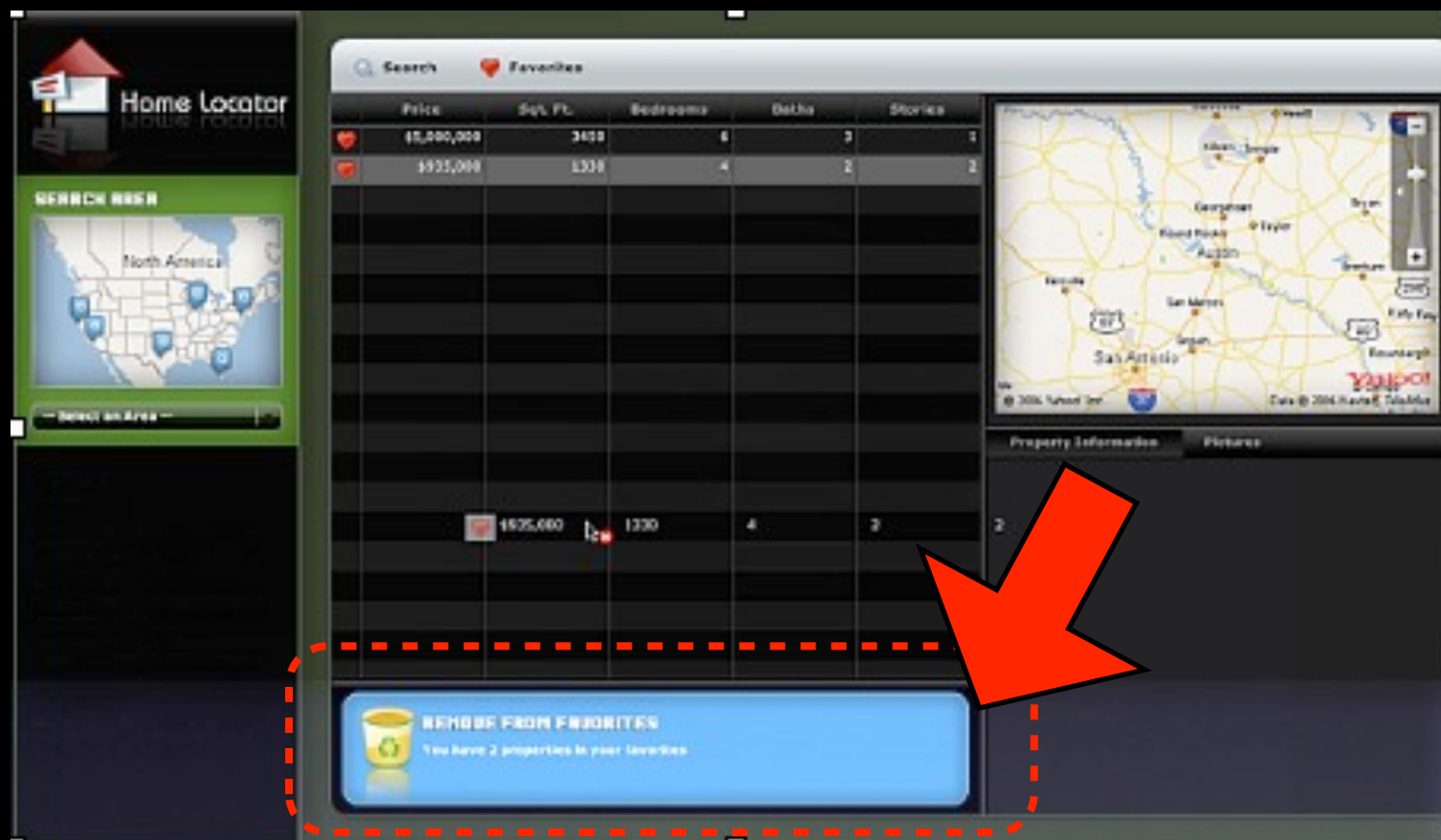
[illegible]

anti-pattern: artificial construct

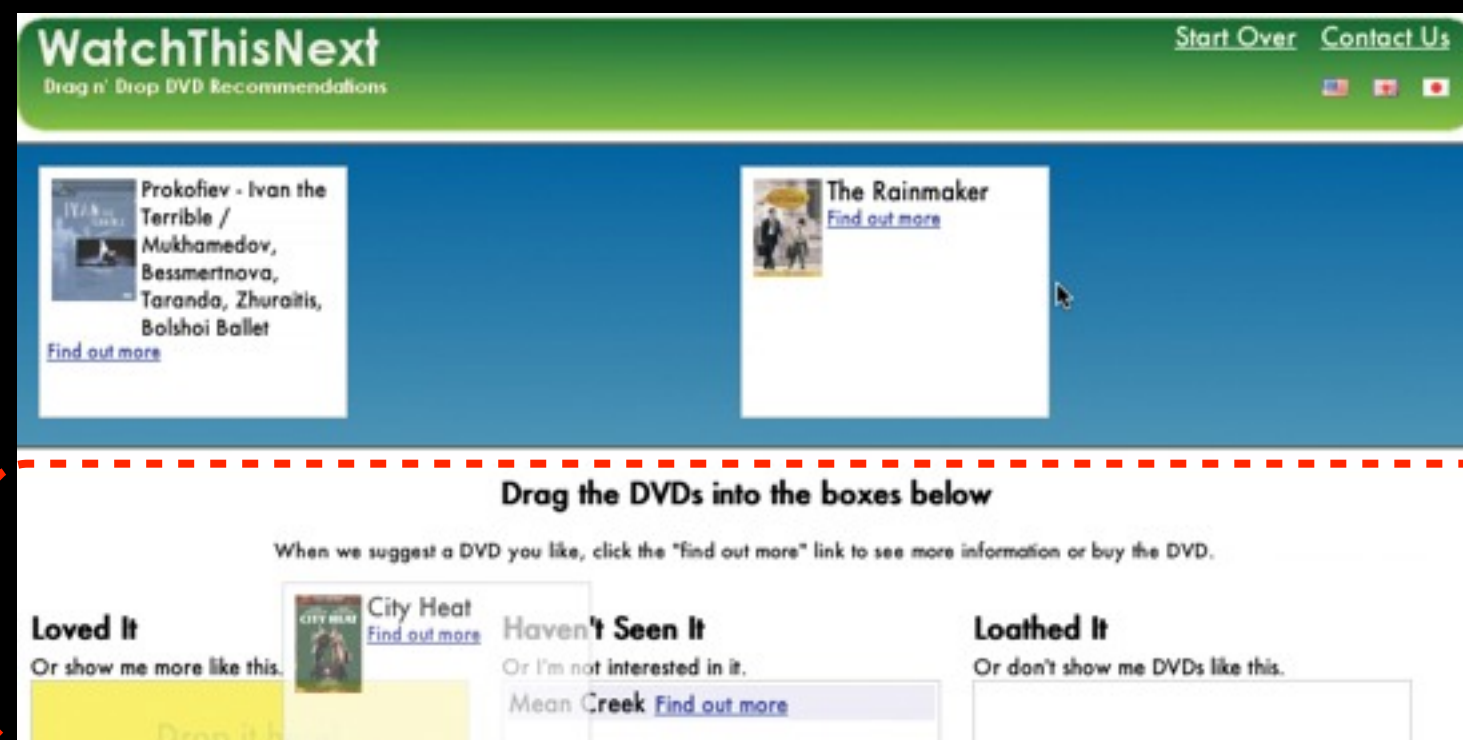
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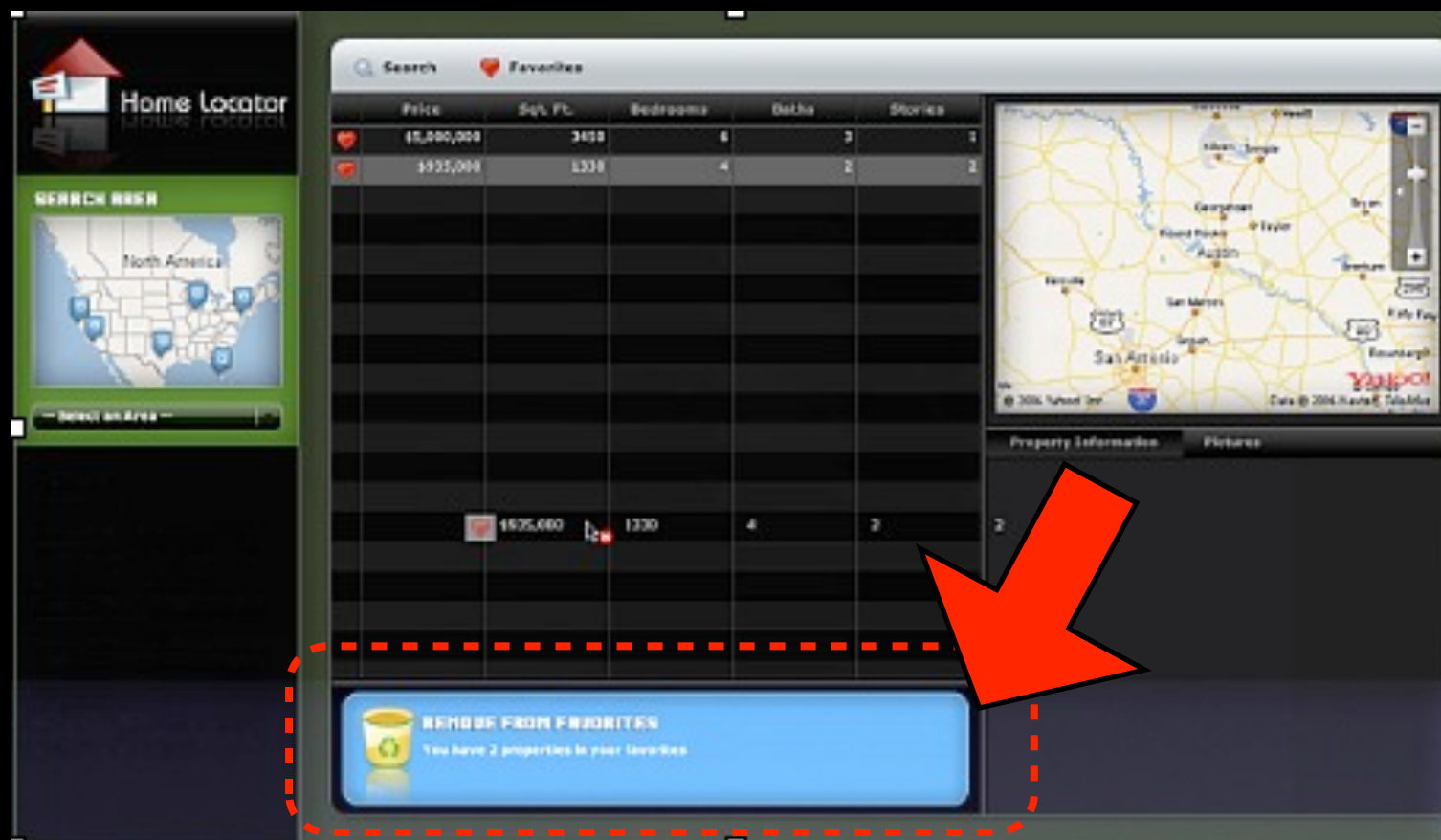
Anti-Pattern: Mismatched Metaphor



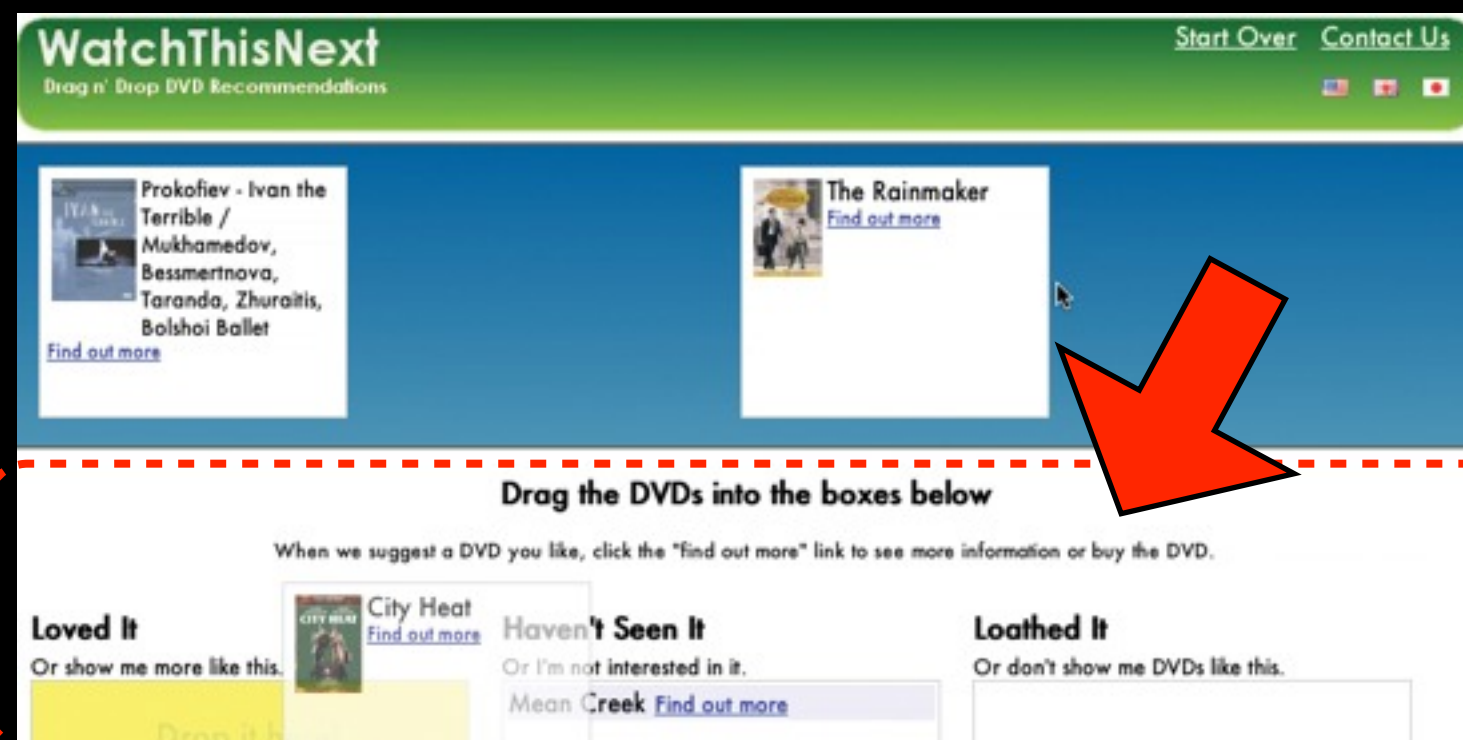
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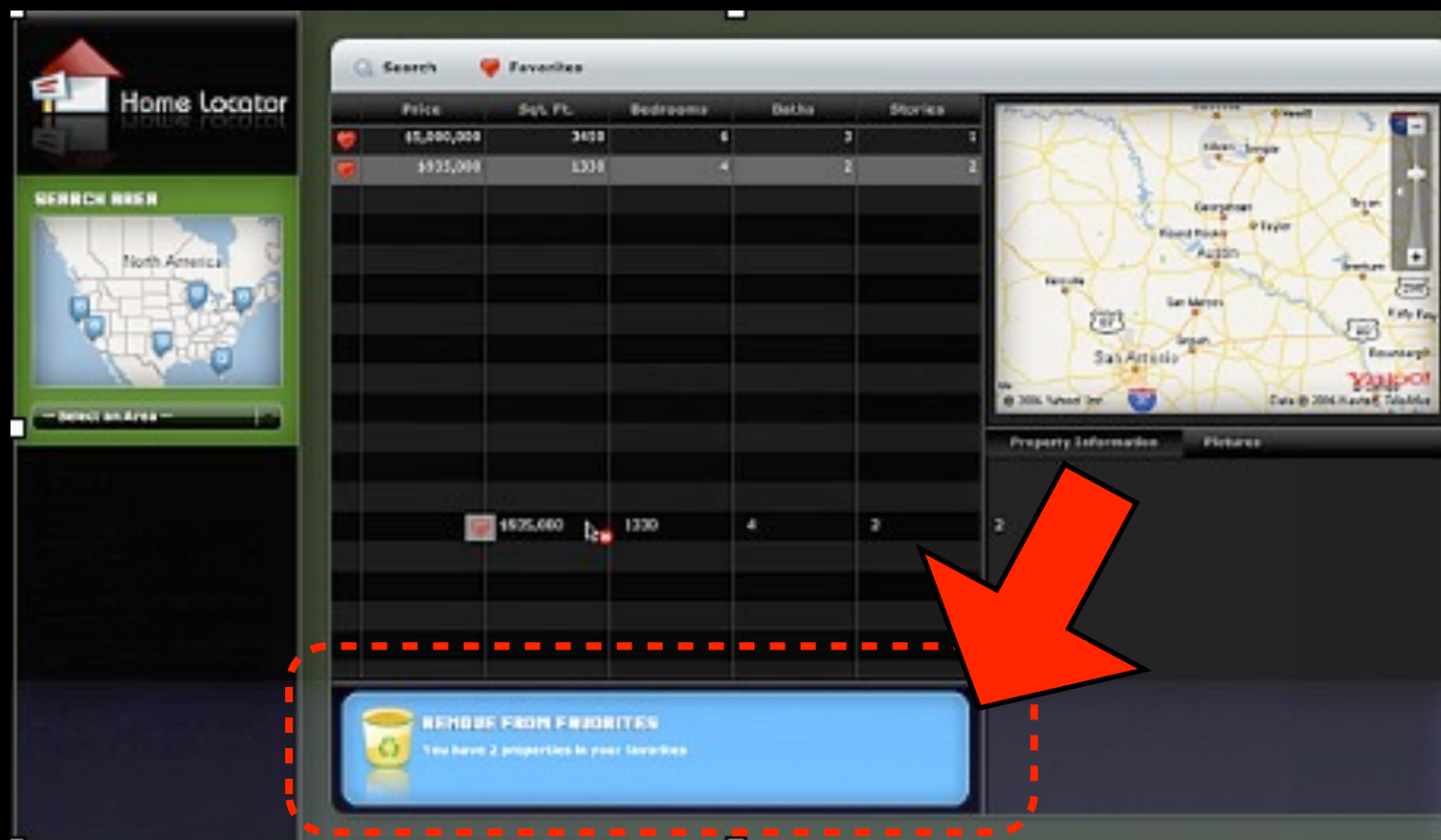
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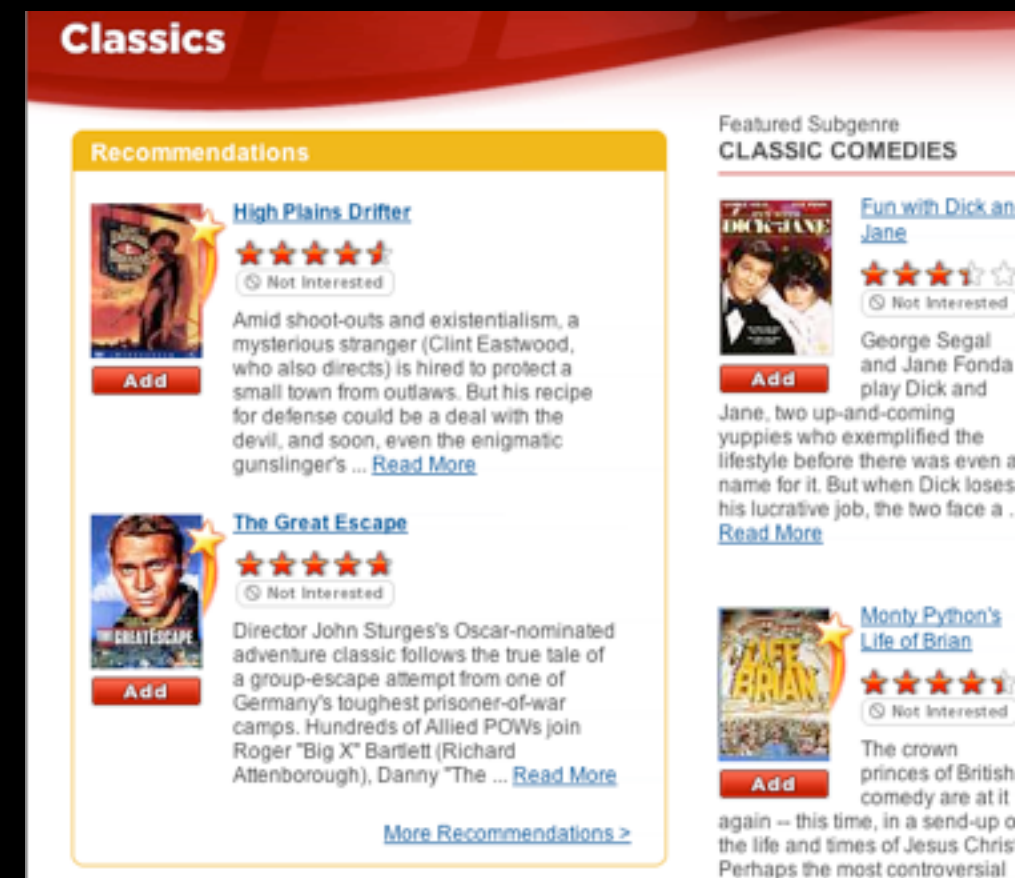
anti-pattern: artificial construct



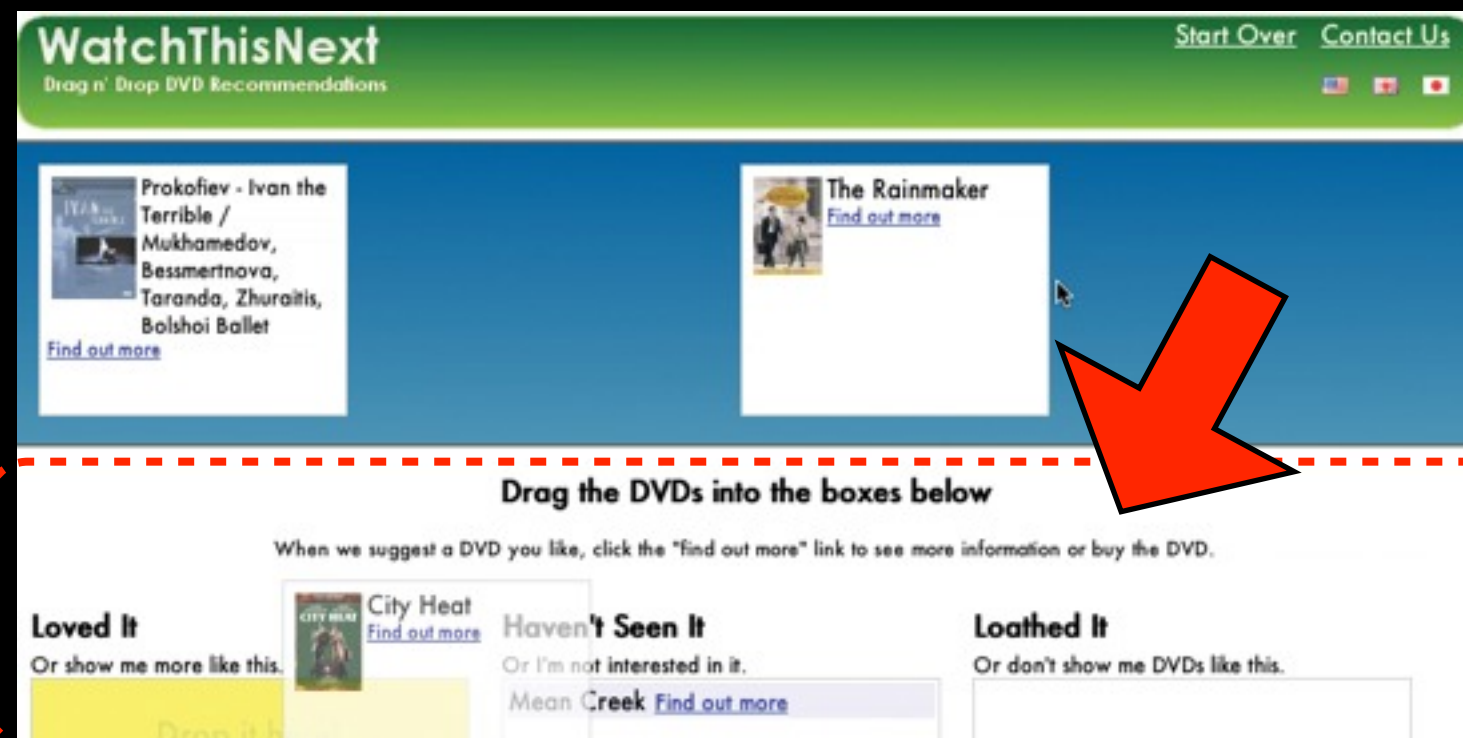
Anti-Pattern: Mismatched Metaphor



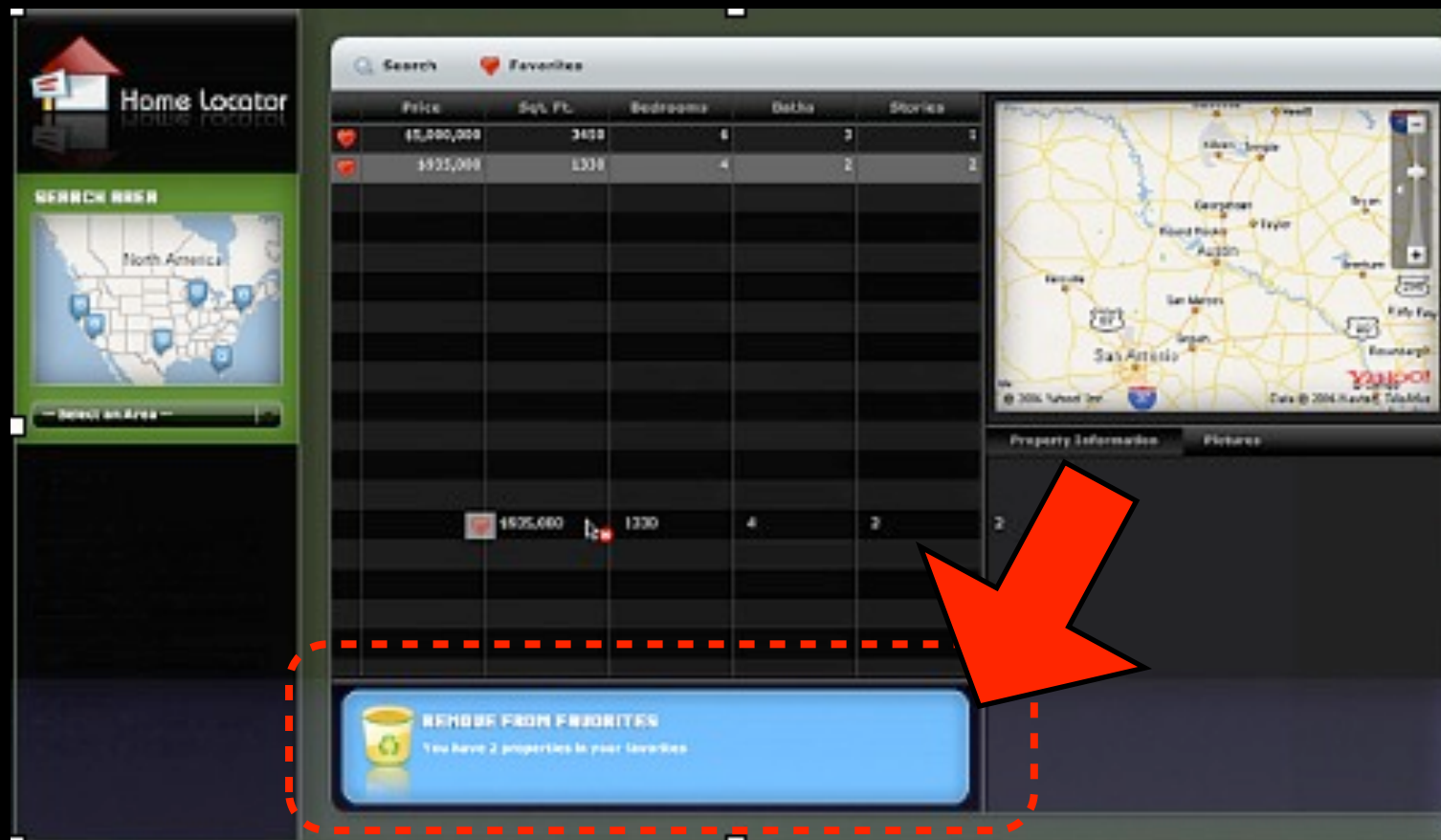
anti-pattern: artificial construct



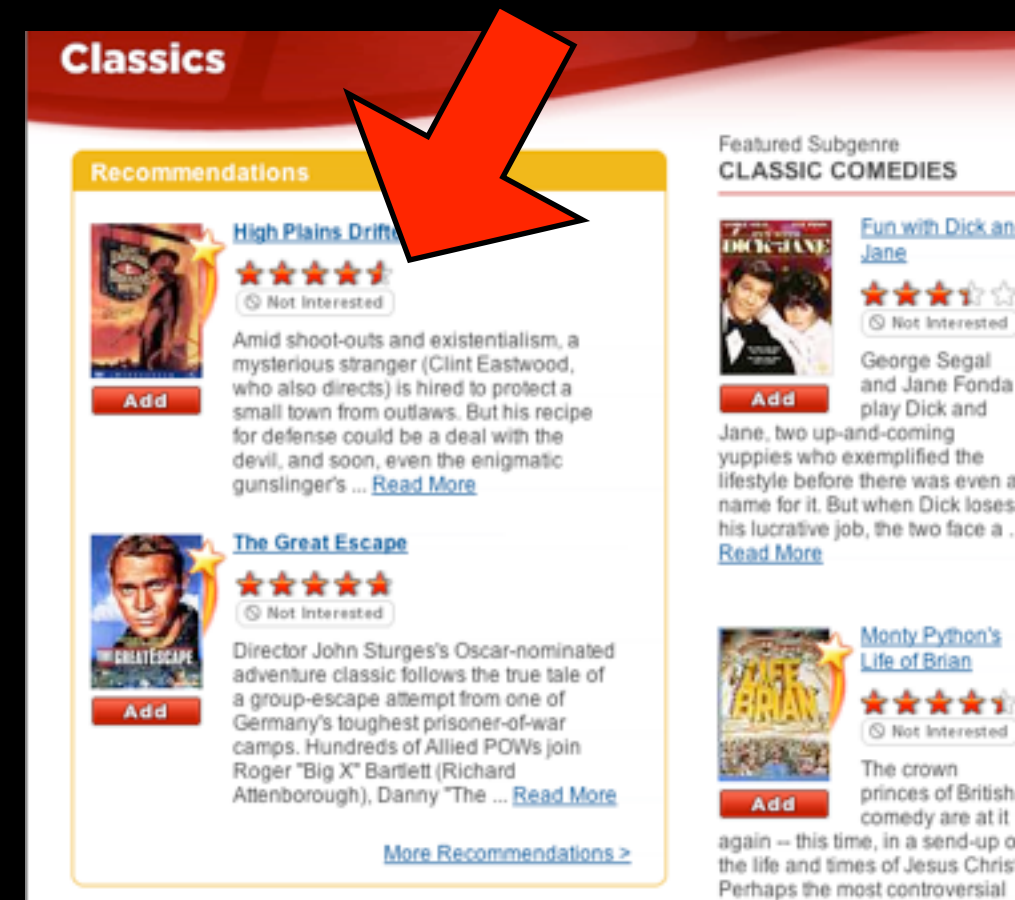
netflix. rate an object. KISS.



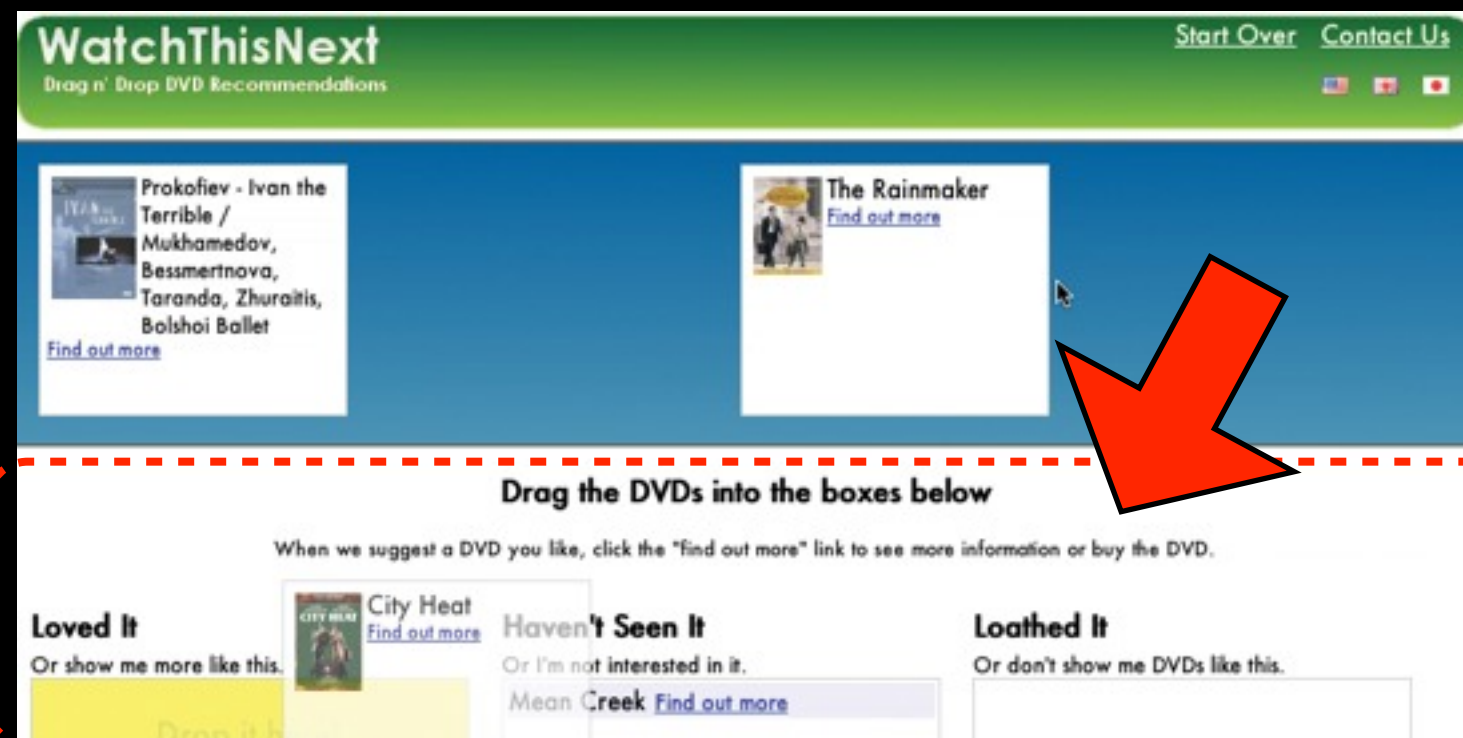
Anti-Pattern: Mismatched Metaphor



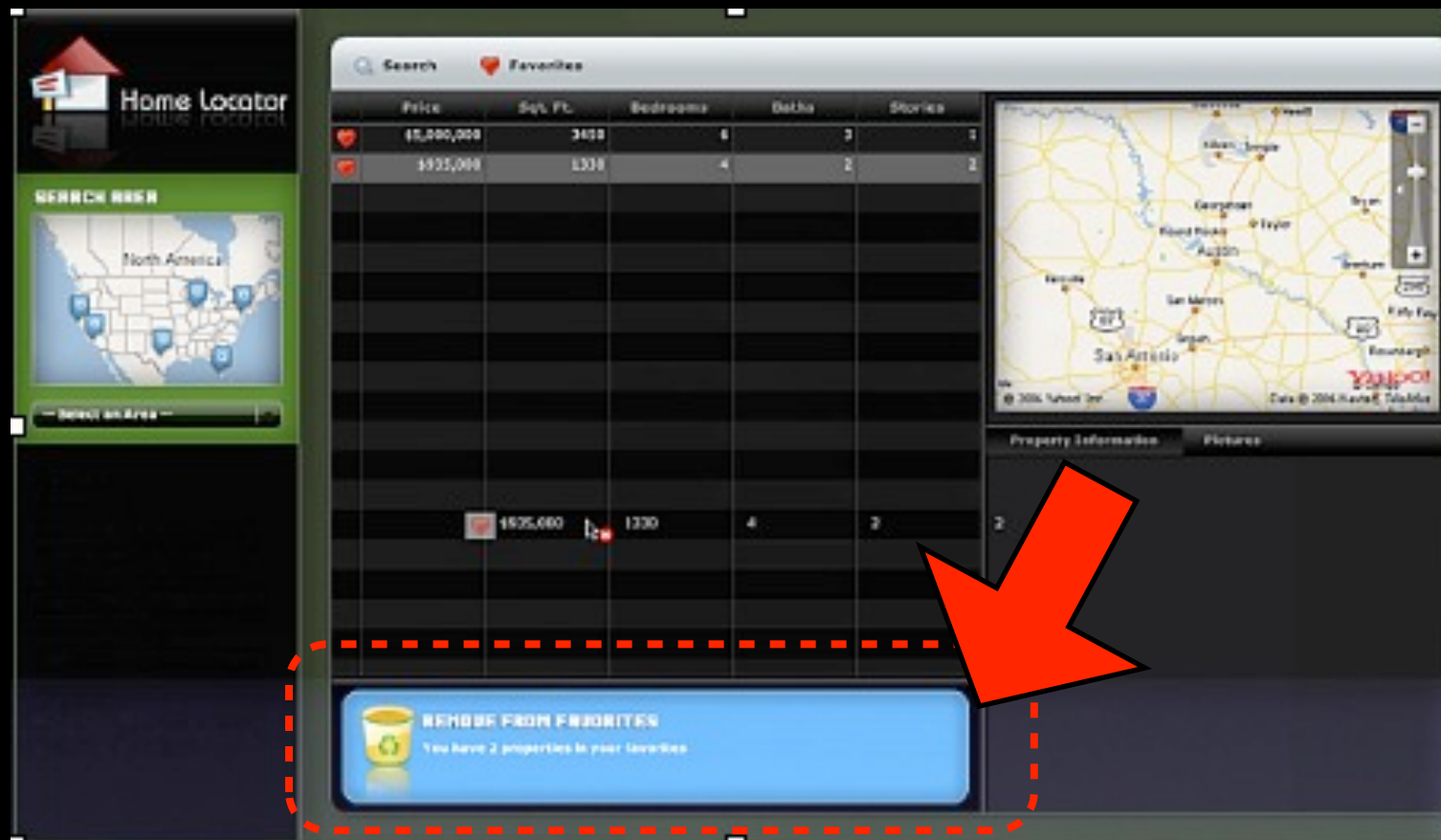
anti-pattern: artificial construct



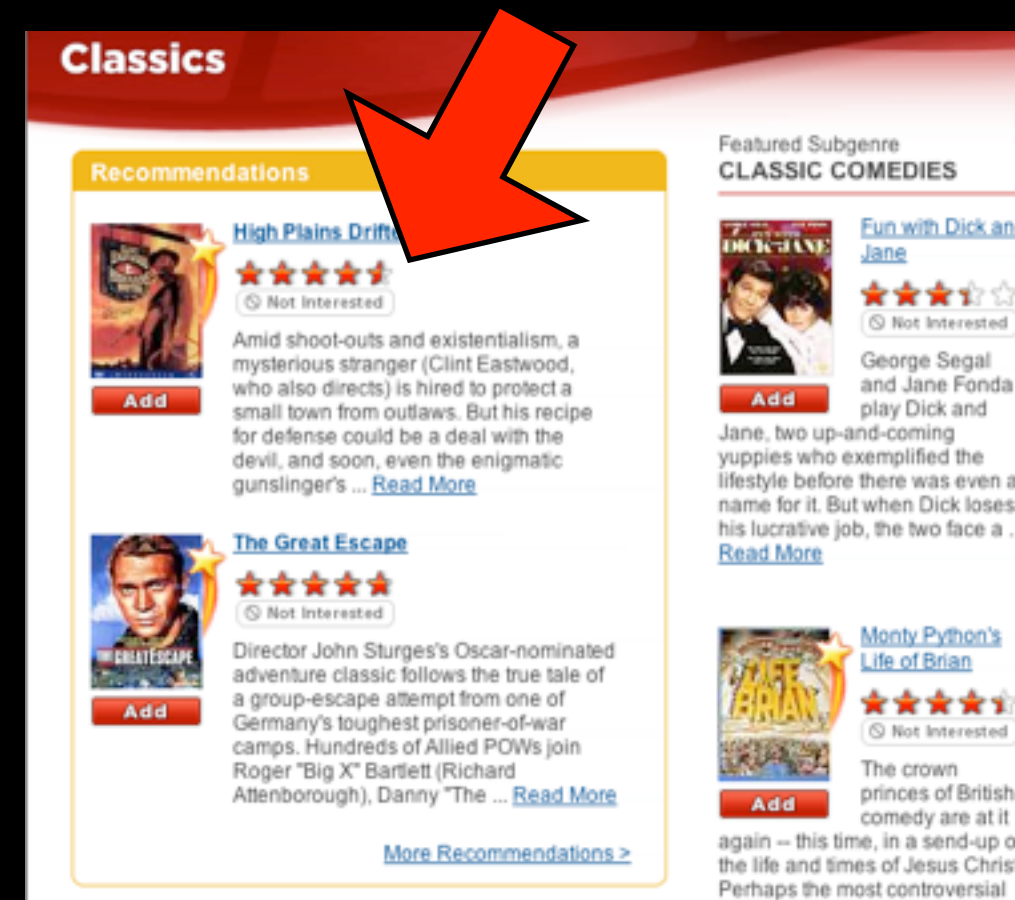
netflix. rate an object. KISS.



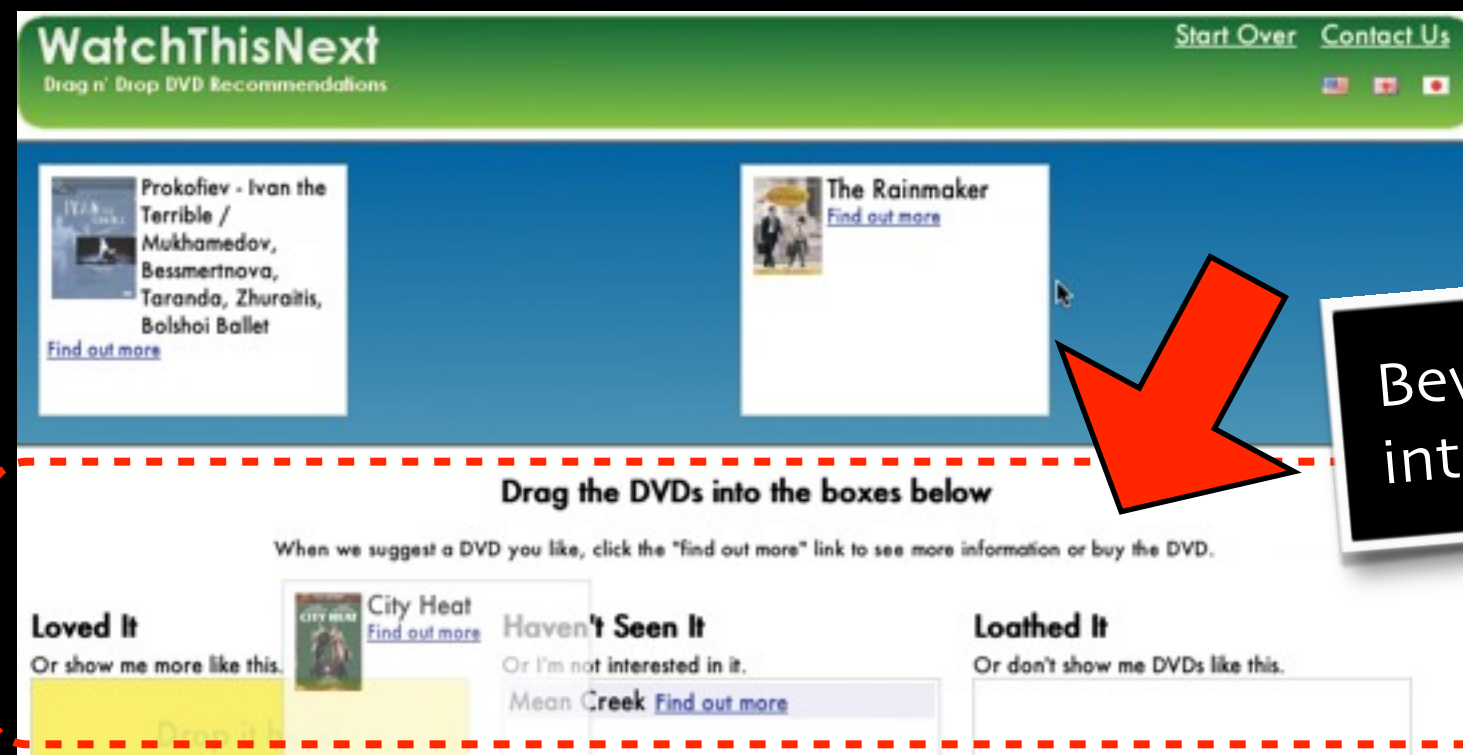
Anti-Pattern: Mismatched Metaphor



anti-pattern: artificial construct

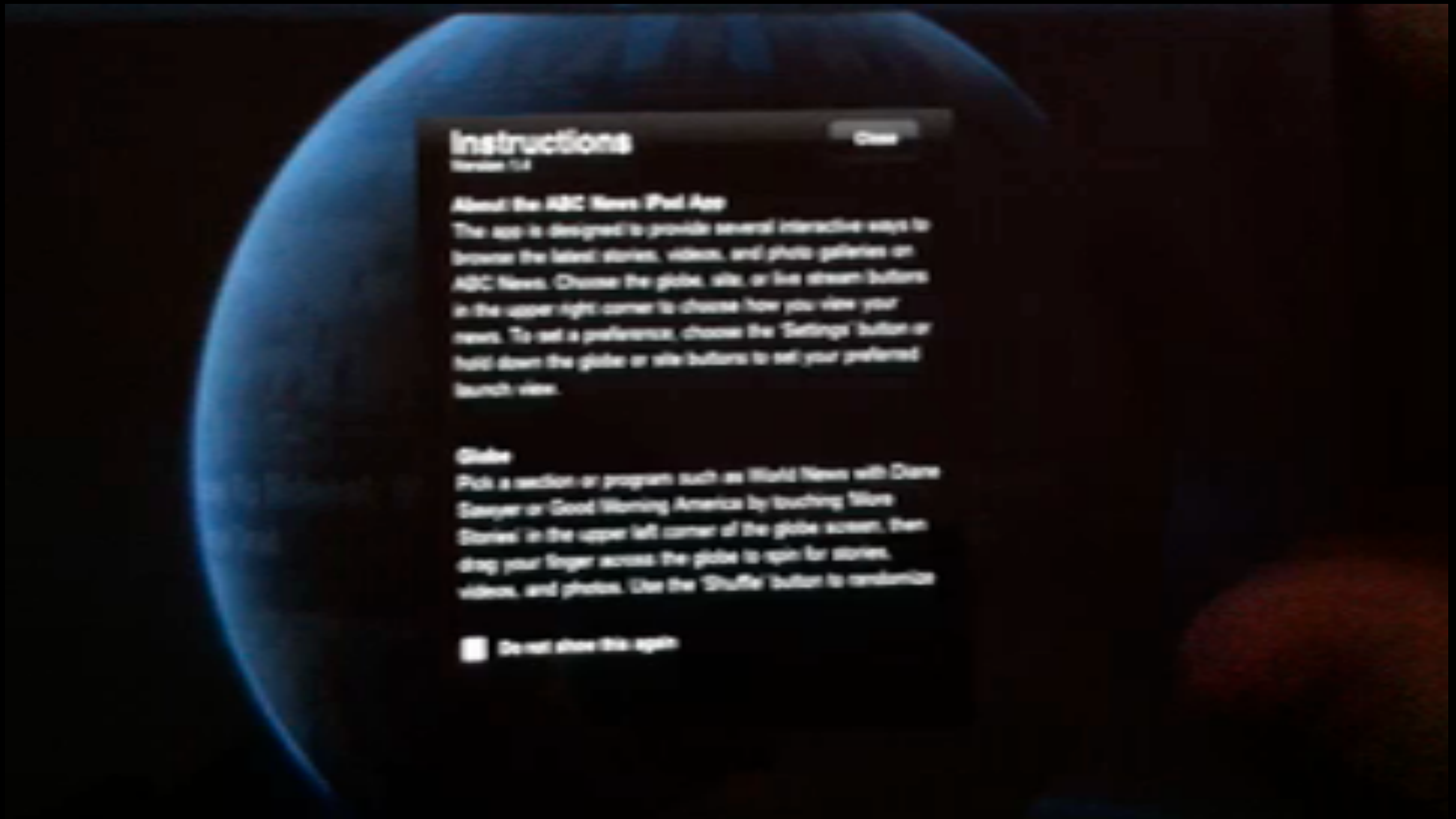


netflix. rate an object. KISS.



Beware of constructing artificial visual interfaces to support drag and drop

Anti-Pattern: Mismatched Metaphor



(Metaphors Gone Wild)

How Fat is Your Input?

	Targeting Size
Web (Pointer)	16 pixels (but accurate as 1 pixel)
Mobile/Tablet (Finger)	44 pixels*
Remote (LRUD)	44 pixels
Remote (Pointer)	44 pixels

* Josh Clark's recommendation - Tapworthy

Physicality Across Platforms

	Input
Web	Pointer Indirect
	Fine-grained (pixel)
Tablet	Finger Direct
	Course-grained (finger)
Mobile	Finger Direct
	Course-grained (finger)
TV	Remote Control Indirect Course-grained (1 object at a time)

Physicality Across Platforms

	Input	Posture
Web	<div>Pointer Indirect</div> <div>Fine-grained (pixel)</div>	Stationary (can support sovereign apps)
Tablet	<div>Finger Direct</div> <div>Course-grained (finger)</div>	On-the-go (Single Purpose Apps)
Mobile	<div>Finger Direct</div> <div>Course-grained (finger)</div>	On-the-go (Single Purpose Apps)
TV	Remote Control Indirect Course-grained (1 object at a time)	Leisure (supports consumption, media apps)

Physicality Across Platforms

	Input	Posture	Navigation
Web	<div>Pointer Indirect</div> <div>Fine-grained (pixel)</div>	Stationary (can support sovereign apps)	Windows Menus, Tabs & Links
Tablet	<div>Finger Direct</div> <div>Course-grained (finger)</div>	On-the-go (Single Purpose Apps)	<div>Panes</div> <div>Buttons & Gestures</div>
Mobile	<div>Finger Direct</div> <div>Course-grained (finger)</div>	On-the-go (Single Purpose Apps)	<div>Panes & Buttons</div>
TV	Remote Control Indirect Course-grained (1 object at a time)	Leisure (supports consumption, media apps)	<div>Panes & Content</div>

Physicality Across Platforms

	Input	Posture	Navigation	Display
Web	<div>Pointer Indirect</div> <div>Fine-grained (pixel)</div>	Stationary (can support sovereign apps)	Windows Menus, Tabs & Links	Large size High resolution Near
Tablet	<div>Finger Direct</div> <div>Course-grained (finger)</div>	On-the-go (Single Purpose Apps)	<div>Panes</div> <div>Buttons & Gestures</div>	Medium size High resolution Near
Mobile	<div>Finger Direct</div> <div>Course-grained (finger)</div>	On-the-go (Single Purpose Apps)	<div>Panes & Buttons</div>	Small size High resolution Near
TV	Remote Control Indirect Course-grained (1 object at a time)	Leisure (supports consumption, media apps)	<div>Panes & Content</div>	Large size High resolution Far away



#2 Maintain Flow

Exploratorium Exhibit



Spot the differences

Spot the differences



Now try again...

Now try again...



Now try again...

Change blindness



Change Blindness

Change Blindness

The brain cannot see a change happening to an element that it has not yet stored - Wikipedia

In other words, it doesn't expect the world to be discontinuous.

**Reduce Page
Switching
to Maintain Flow**

"Special" Experience

NETFLIX

Recently Watched

Suggestions for You

MORE

New Arrivals

Genres

Instant Queue

Search

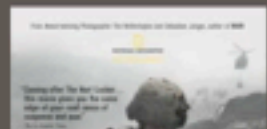


TV



✕ View more suggestions

Emotional Movies



"Special" Experience

Principles followed:
Focus + context, Simple
navigation, User Control

NETFLIX

Recently Watched

Suggestions for You

MORE

New Arrivals

Genres

Instant Queue

Search

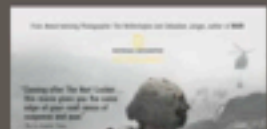


TV



✕ View more suggestions

Emotional Movies



"Plus" Experience

NETFLIX

2 / 332

Search

Instant Queue



Bella

2006 PG-13 1h 31m



Two lost souls – Nina, a pregnant, unmarried waitress, and Jose, an introspective cook with a tragic past – find solace in each other as their lives become unpredictably linked throughout the course of one incredible day.

Cast: Eduardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

Director: Alejandro Gomez Monteverde

Recently Watched



Emotional Dramas

"Plus" Experience

NETFLIX

Instant Queue



2006 PG-13 1h 31m



Two lost souls – Nina, a pregnant, unmarried waitress, and Jose, an introspective cook with a tragic past – find solace in each other as their lives become unpredictably linked throughout the course of one incredible day.

Cast: Eduardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

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Recently Watched



Emotional Dramas

Which Won?

Which Won?

NETFLIX

2 / 332

Search

Instant Queue



Bella

2006 PG-13 1h 31m



Two lost souls -- Nina, a pregnant, unmarried waitress, and Jose, an introspective cook with a tragic past -- find solace in each other as their lives become unpredictably linked throughout the course of one incredible day.

Cast: Eduardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

Director: Alejandro Gomez Monteverde

Recently Watched



Emotional Dramas

Which Won?

NETFLIX

2 / 332

Search

Instant Queue



Recently Watched



Emotional Dramas



"Plus" experience won.

Reduces page transitions, feels more cinematic, less jarring.

Maintains Flow

1h 31m

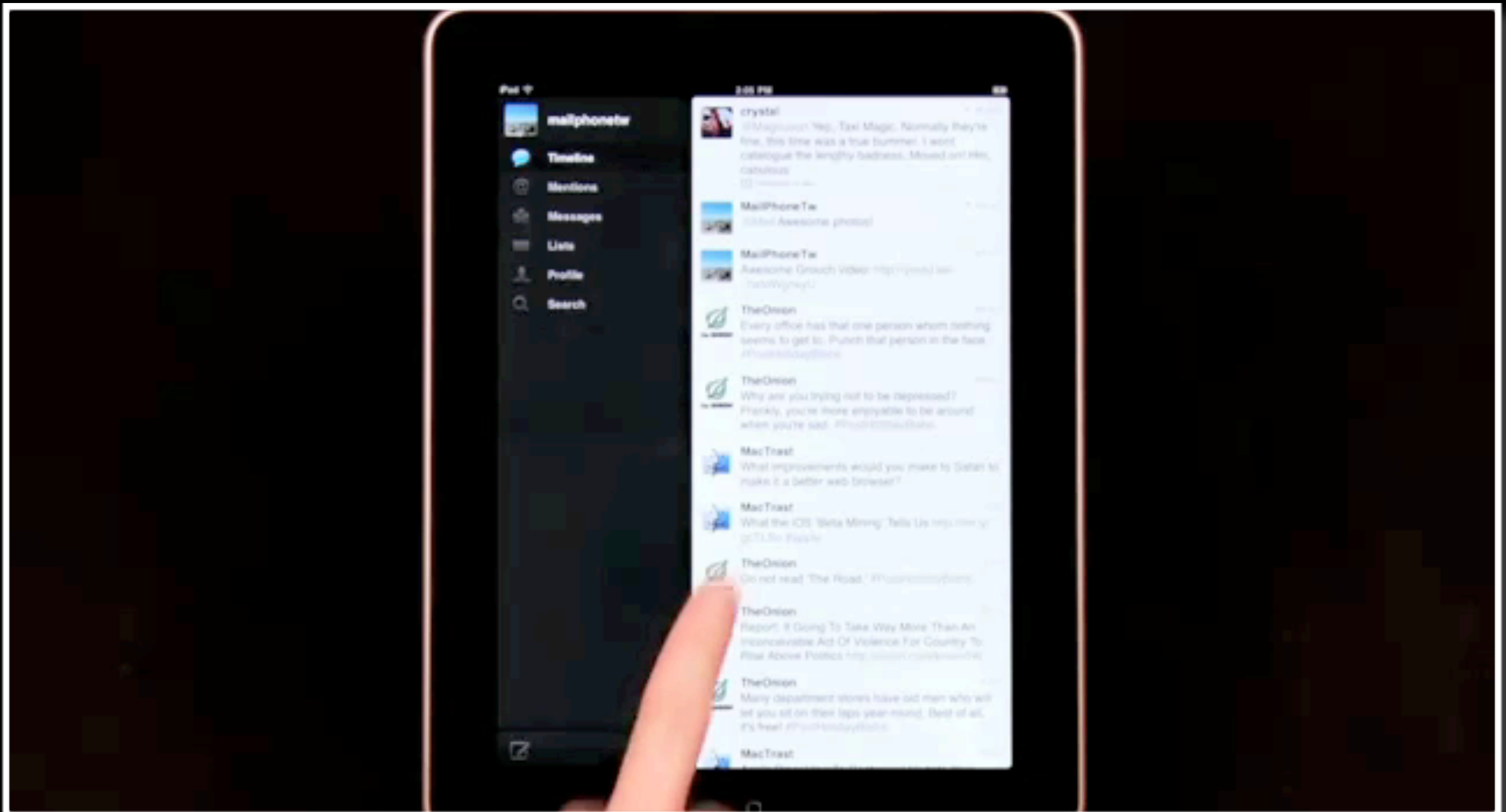
— Nina, a pregnant, mess, and Jose, an look with a tragic ce in each other as ne unpredictably ut the course of ay.

Ricardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

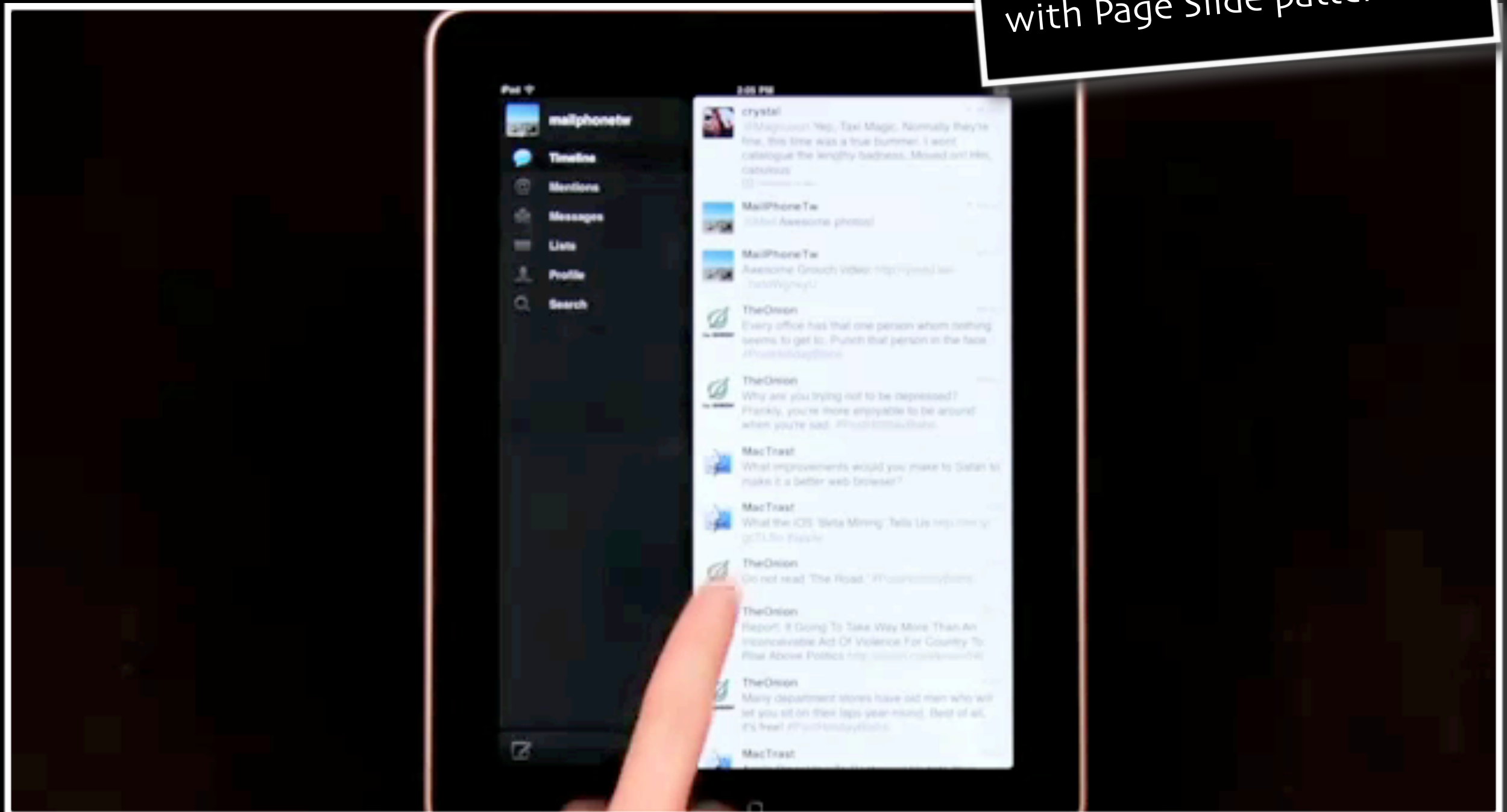
Director: Alejandro Gomez Monteverde

Twitter as iPad App



Twitter as iPad App

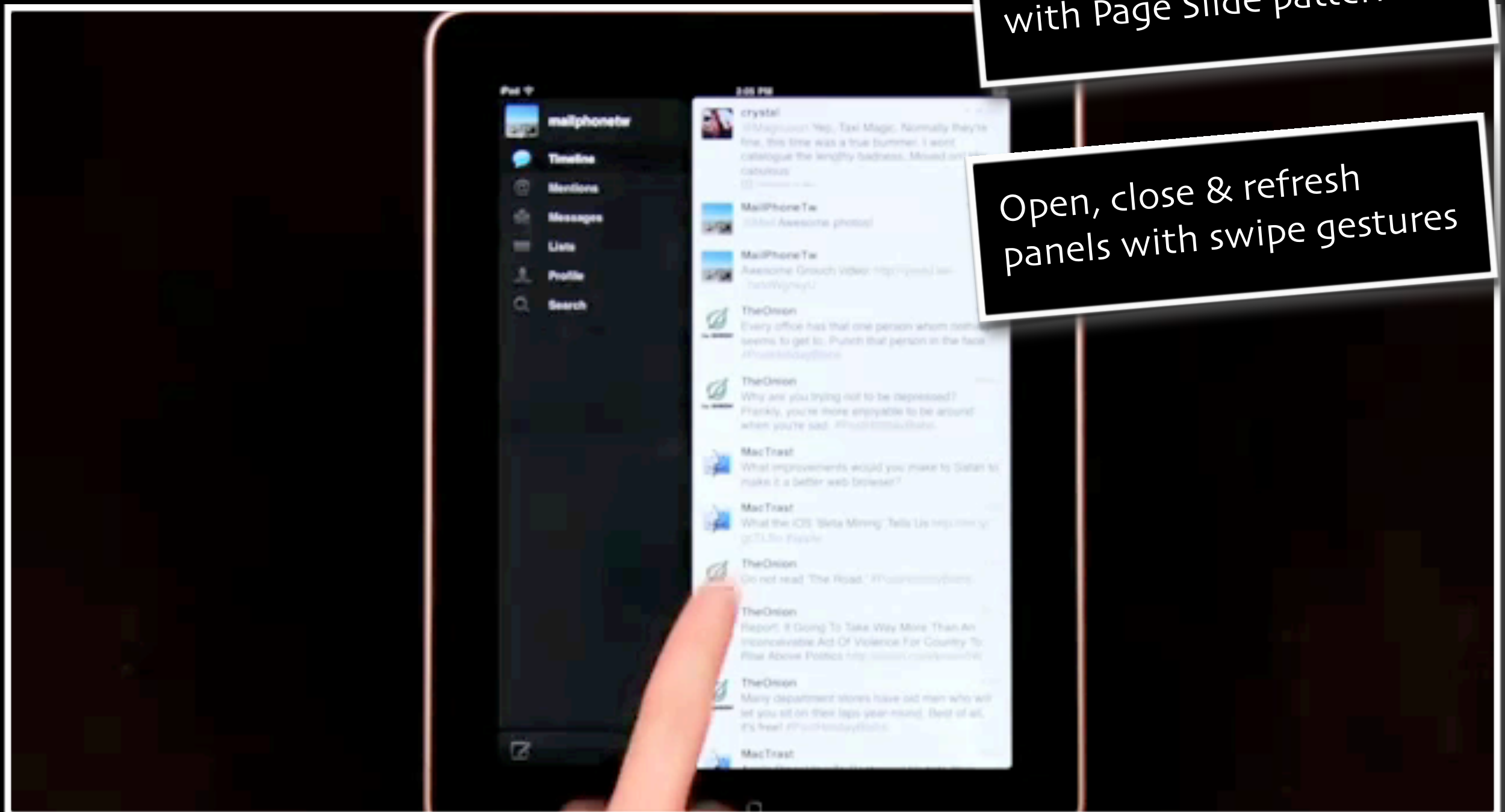
Minimize page transitions
with Page Slide pattern



Twitter as iPad App

Minimize page transitions with Page Slide pattern

Open, close & refresh panels with swipe gestures

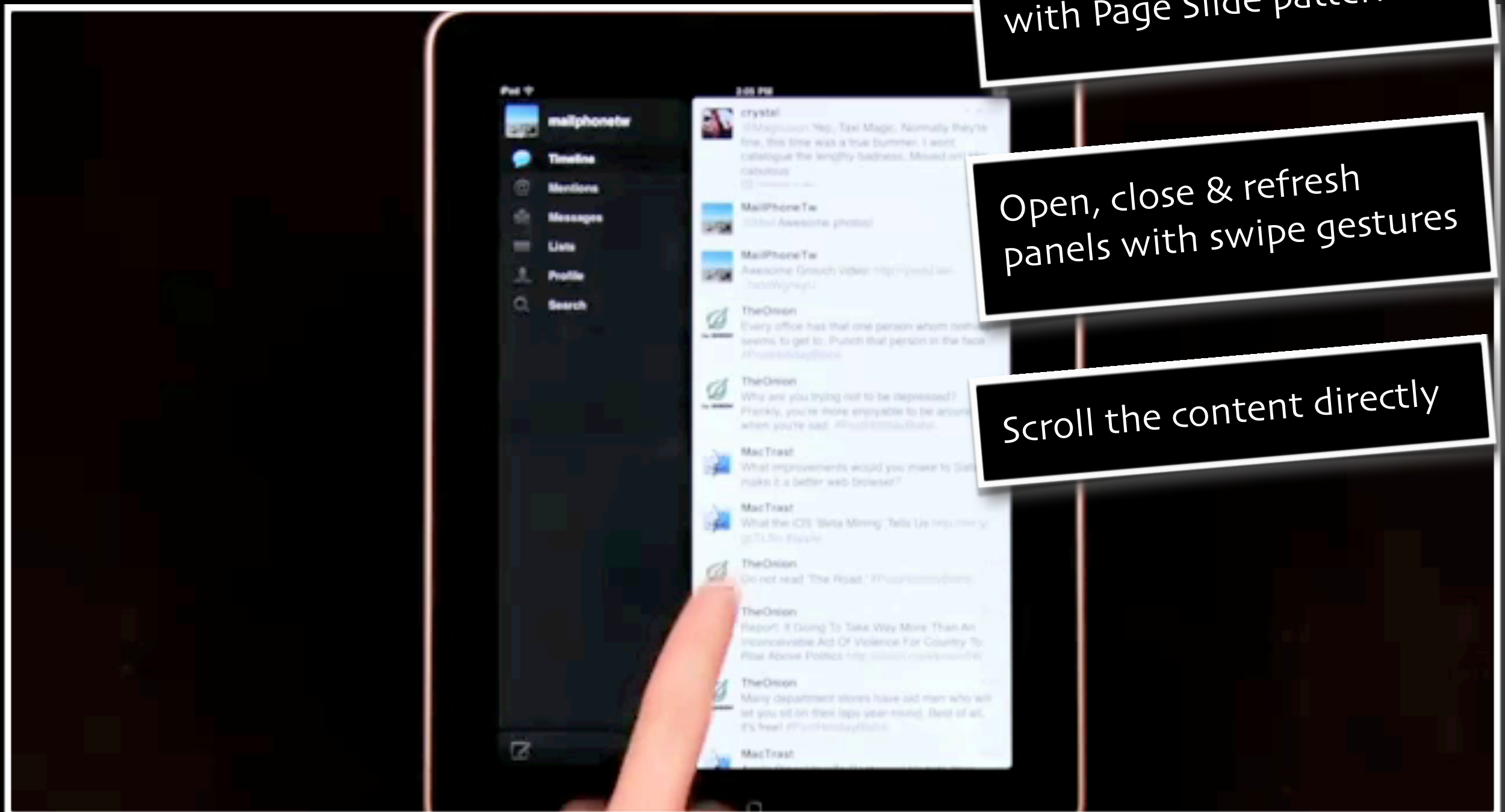


Twitter as iPad App

Minimize page transitions with Page Slide pattern

Open, close & refresh panels with swipe gestures

Scroll the content directly



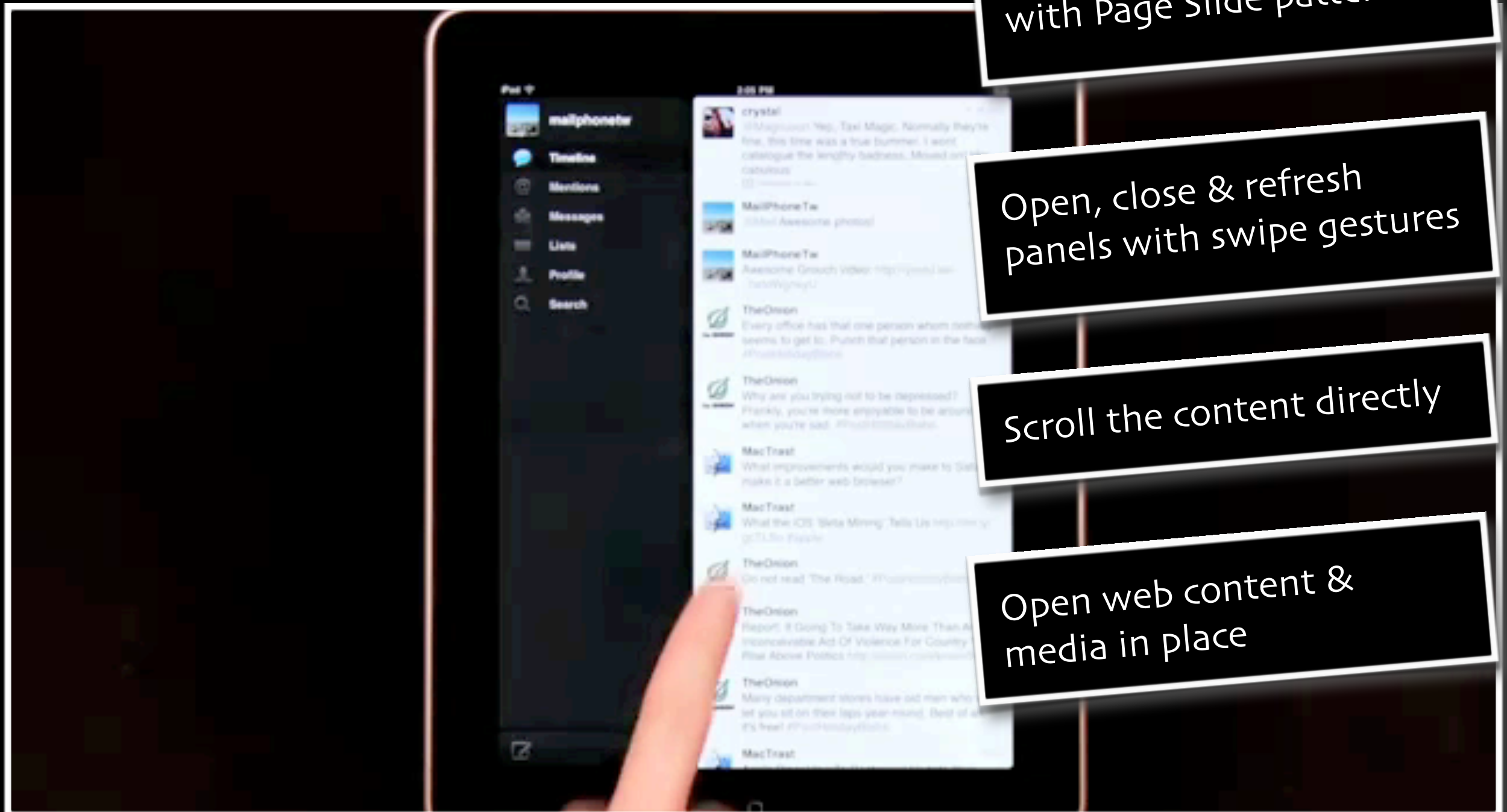
Twitter as iPad App

Minimize page transitions with Page Slide pattern

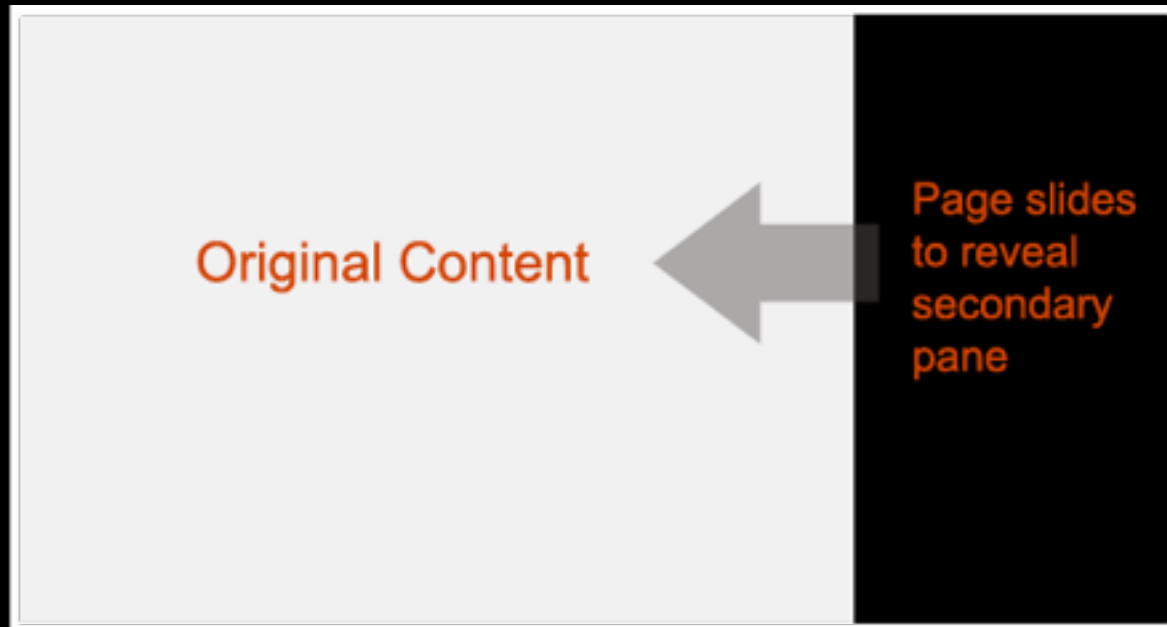
Open, close & refresh panels with swipe gestures

Scroll the content directly

Open web content & media in place



Page Slide



<http://srobbin.com/blog/jquery-pageslide/>

Page Slide

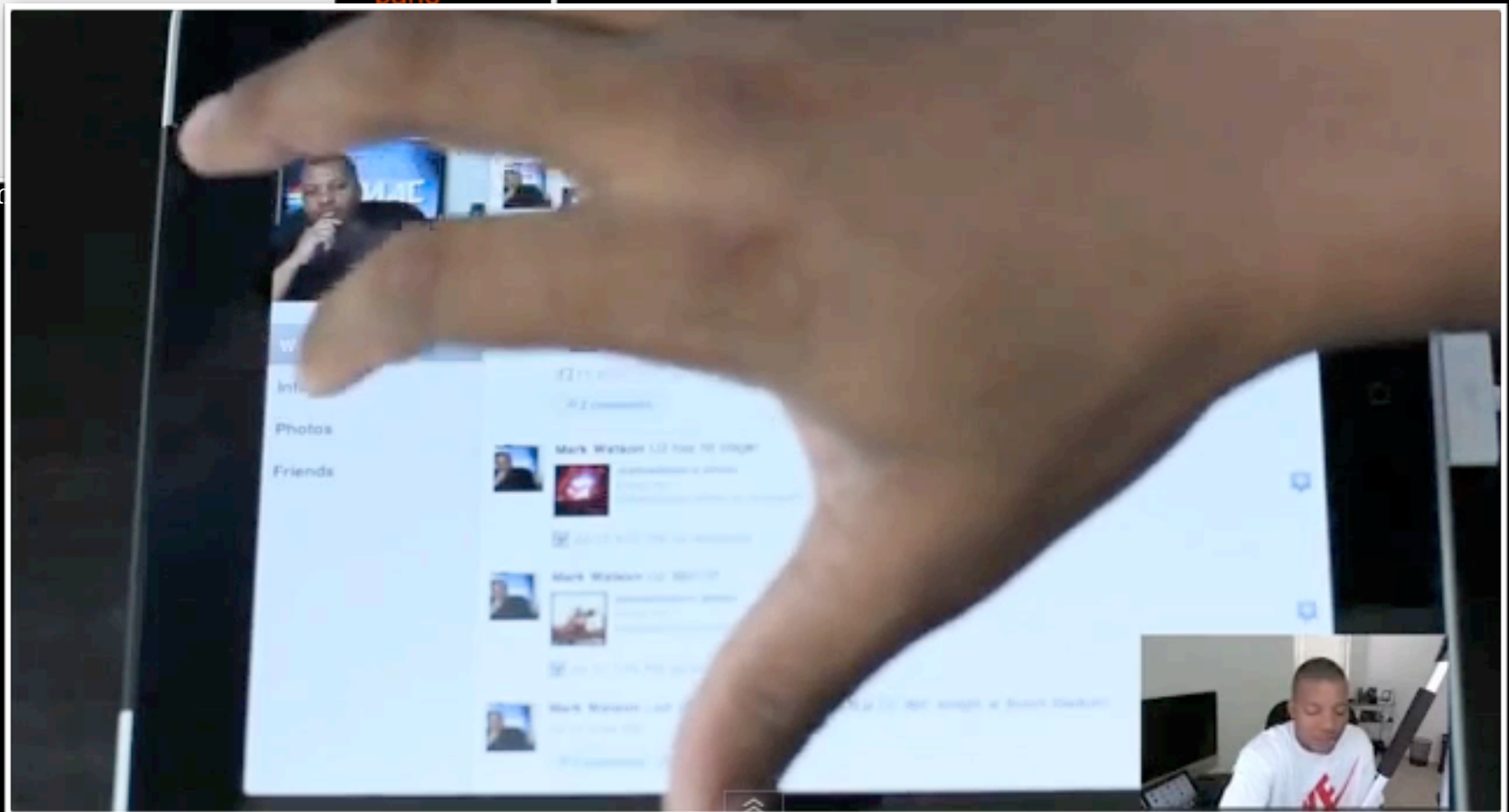
Page Slides extend the real estate and simplify “window management”

Original Content



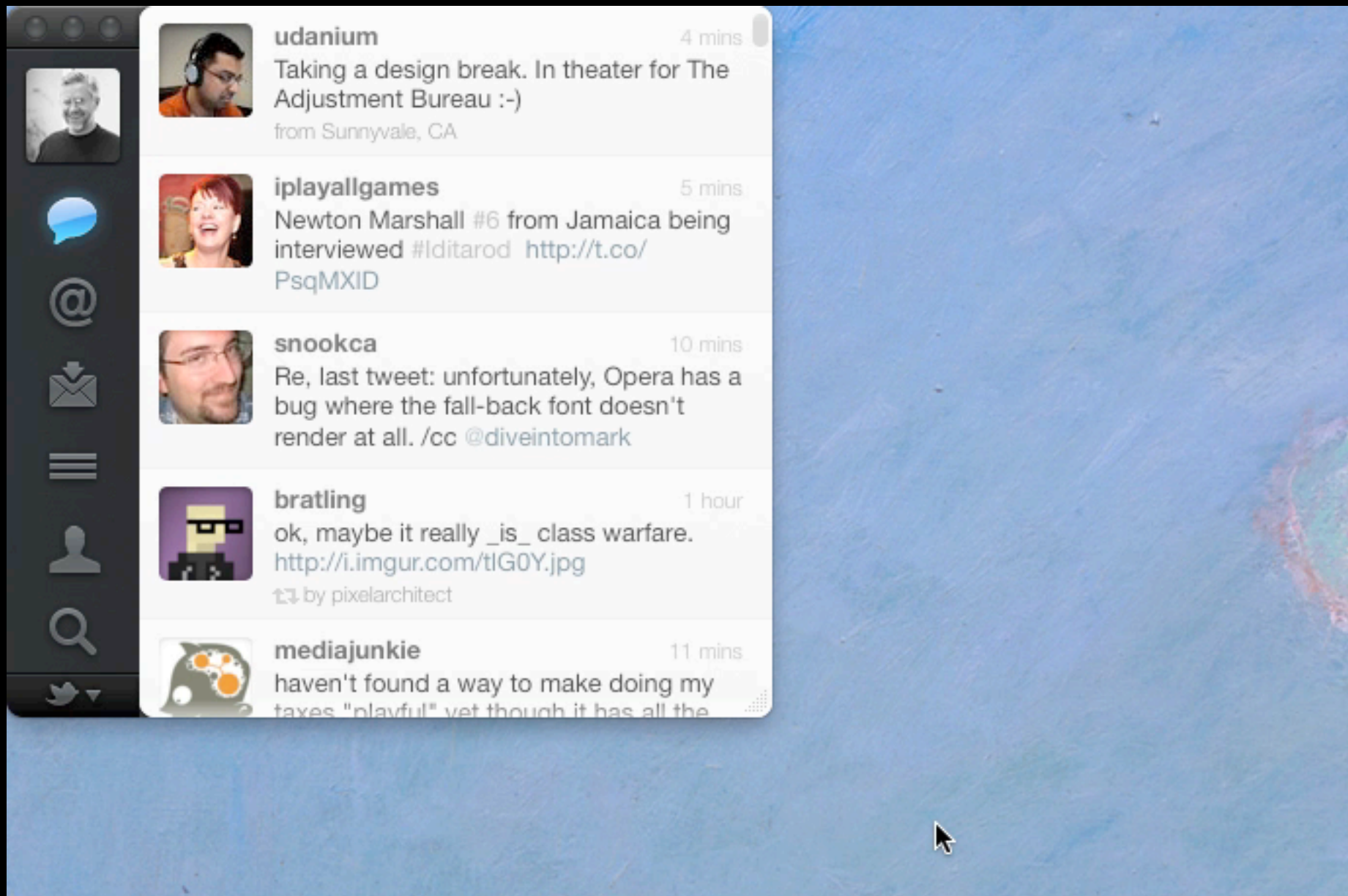
Page slides to reveal secondary pane

<http://srobbin.com>

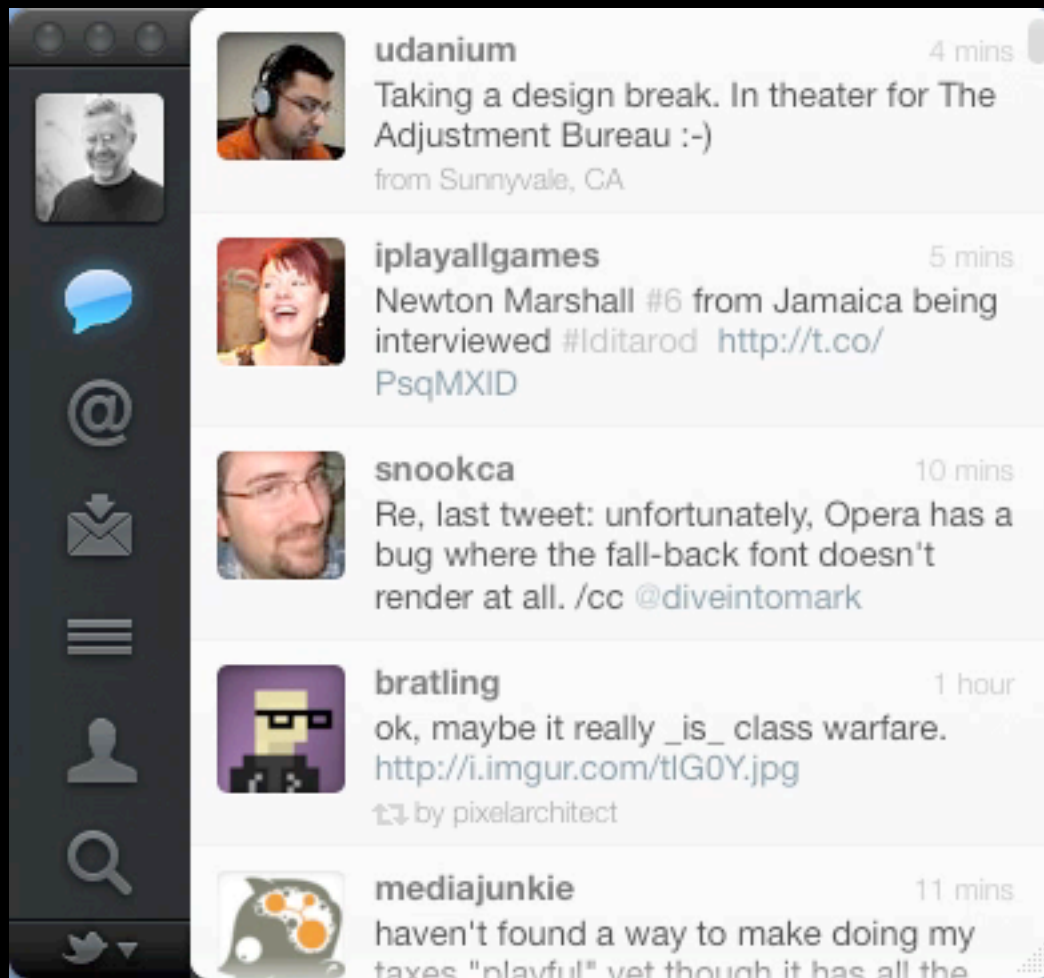


<http://www.youtube.com/watch?v=WBv3fFg8t8g>

Twitter as Mac App

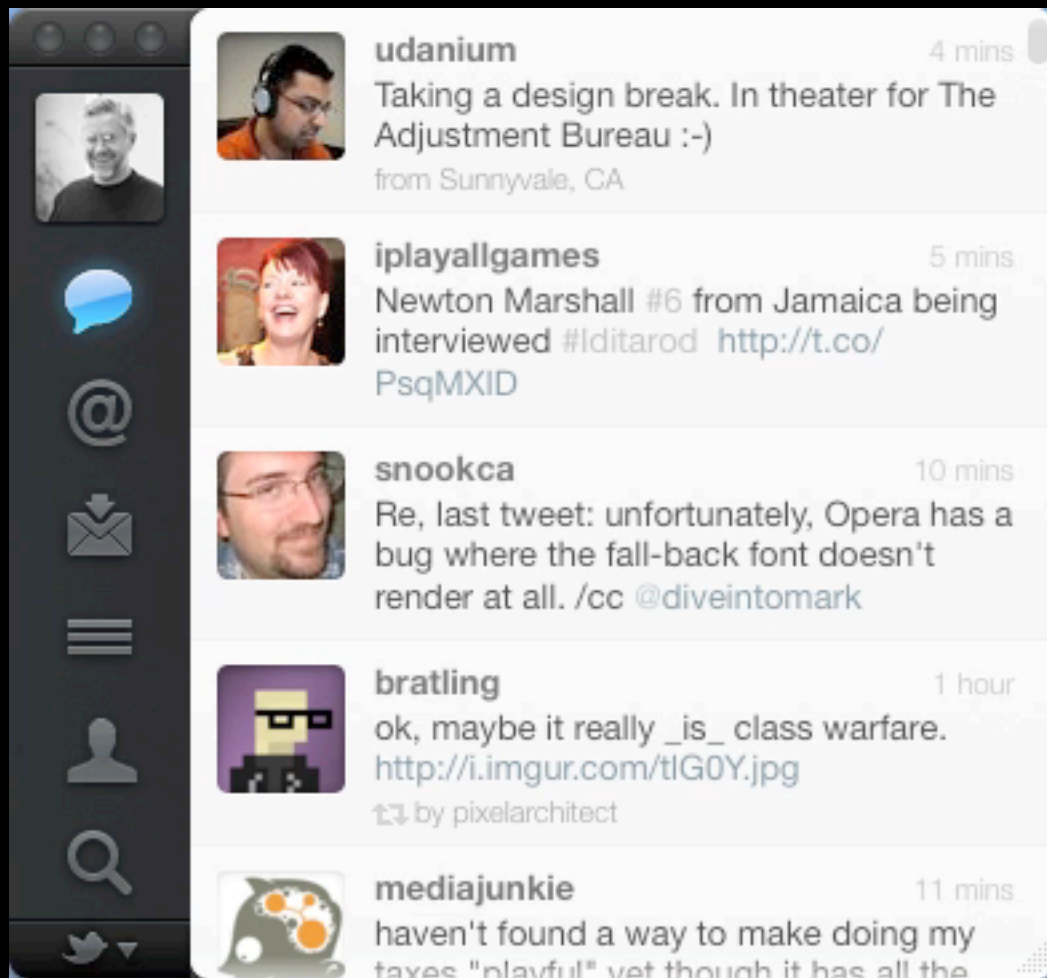


Twitter as Mac App



Navigate to other areas
using smooth transitions
(make flow visible)

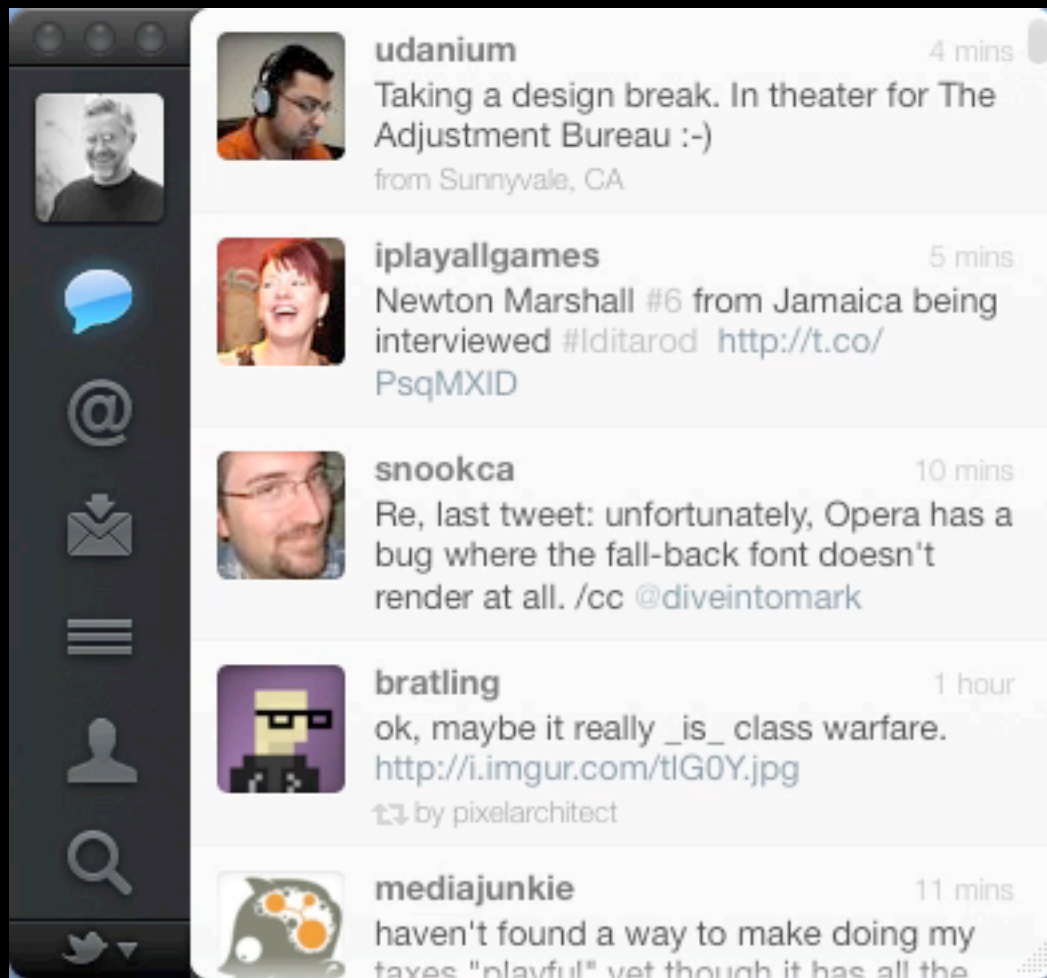
Twitter as Mac App



Navigate to other areas
using smooth transitions
(make flow visible)

Anti-Pattern: breaking the
flow with menus &
popouts.

Twitter as Mac App



Navigate to other areas
using smooth transitions
(make flow visible)

Anti-Pattern: breaking the
flow with menus &
popouts.

Rethink desktop apps to
use real estate more
creatively

Twitter as Web App

The screenshot displays the Twitter web application interface. At the top, there is a navigation bar with the Twitter logo, a search bar, and links for Home, Profile, Messages, and Who To Follow. The user's name, billwscott, is visible in the top right corner.

The main content area is divided into two columns. The left column shows a timeline of tweets. The right column shows a detailed view of a tweet from @sinequanon.

Timeline:

- sinequanon** Rowell Sotto: Great presentation on the evolution and technical acumen of Renaissance and Baroque engraving techniques. [FLASH]. <http://goo.gl/EVJYE> 1 minute ago
- dbarradas** Daniel Barradas: Video: Floating <http://tumblr.com/x321p0zwei> 1 minute ago
- iplayallgames** Cindy Ritzman: Dogs resting an hour before running the #lditarod yfrog.com/gz9t4zrj 3 minutes ago
- iplayallgames** Cindy Ritzman: Mackey at the start! #lditarod yfrog.com/h0pnxxj 3 minutes ago
- rashmi** Rashmi Sinha: Yes, I revoked that app. Go here if you were tricked: <https://twitter.com/settings/connections> 5 minutes ago
- billwscott** Bill Scott: @rashmi Yikes. Tweet spam is so annoying. The good thing is that "the voice" of the tweet is so different than your voice it is obvious. 6 minutes ago

Tweet Detail View (from @sinequanon):

Great presentation on the evolution and technical acumen of Renaissance and Baroque engraving techniques. [FLASH]. <http://goo.gl/EVJYE> 1 minute ago via web

Tweets containing **Renaissance and Baroque**

dose2day daily dose: Girolamo Frescobaldi: Bridging Renaissance and Baroque Music <http://www.redgag.com/c-ljglid> #music #renaissance #composers 4 hours ago

gd2know gd2know: says Girolamo Frescobaldi: Bridging Renaissance and Baroque Music <http://ping.fm/5uODO> music renaissance compo... <http://plurk.com/p/b0w2hn> 4 hours ago

Tweets from **@sinequanon**

Canceled opening the page

Twitter as Web App

The screenshot displays the Twitter web application interface. At the top, there is a navigation bar with the Twitter logo, a search bar, and links for Home, Profile, Messages, and Who To Follow. The user's name, billwscott, is visible in the top right corner.

The main content area is titled "What's happening?" and features a text input field for posting a tweet. Below this, a timeline of tweets is shown. The tweets are from various users, including sinequanon, dbarradas, iplayallgames, rashmi, and billwscott. Each tweet includes a profile picture, the user's name, the text of the tweet, and a timestamp. Some tweets include links or images.

On the right side of the interface, there is a sidebar with a search bar and a list of tweets containing the keywords "Renaissance" and "Baroque". The tweets in the sidebar are from users like dose2day and gd2know, and they discuss Girolamo Frescobaldi's music.

A black callout box with white text is overlaid on the right side of the image, stating: "Minimize page transitions with Page Slide pattern".

At the bottom of the page, a status bar indicates "Canceled opening the page".

Twitter as Web App

The image shows a screenshot of the Twitter web application interface. The top navigation bar includes the Twitter logo, a search bar, and links for Home, Profile, Messages, and Who To Follow. The user 'billwscott' is logged in. The main content area displays a timeline of tweets. Two black callout boxes with white text are overlaid on the right side of the interface. The first callout box points to a tweet by 'sinequanon' and contains the text 'Minimize page transitions with Page Slide pattern'. The second callout box points to a tweet by 'rashmi' and contains the text 'Find myself annoyed with web pages opening in another window'. At the bottom of the browser window, a status bar reads 'Canceled opening the page'.

twitter Home Profile Messages Who To Follow billwscott

What's happening?

Timeline @Mentions Retweets Searches Lists

sinequanon Rowell Sotto
Great presentation on the evolution and technical acumen of Renaissance and Baroque engraving techniques. [FLASH].
<http://goo.gl/EVJYE>
1 minute ago ☆ Favorite ↻ Retweet ↩ Reply

dbarradas Daniel Barradas
Video: Floating <http://tumblr.com/x321p0zwai>
1 minute ago

iplayallgames Cindy Ritzman
Dogs resting an hour before running the #lditarod yfrog.com/gz9t4zrj
3 minutes ago

iplayallgames Cindy Ritzman
Mackey at the start! #lditarod yfrog.com/h0pnxxj
3 minutes ago

rashmi Rashmi Sinha
Yes, I revoked that app. Go here if you were tricked:
<https://twitter.com/settings/connections>
5 minutes ago ☆ Favorite ↻ Retweet ↩ Reply

billwscott Bill Scott
@rashmi Yikes. Tweet spam is so annoying. The good thing is that "the voice" of the tweet is so different than your voice it is obvious.
6 minutes ago

Minimize page transitions with Page Slide pattern

Find myself annoyed with web pages opening in another window

Canceled opening the page

Twitter as Web App

The image shows a screenshot of the Twitter web application interface. The top navigation bar includes the Twitter logo, a search bar, and links for Home, Profile, Messages, and Who To Follow. The user's name, billwscott, is visible in the top right corner. The main content area displays a timeline of tweets. Three callout boxes are overlaid on the right side of the interface, each pointing to a specific tweet or feature:

- Callout 1:** "Minimize page transitions with Page Slide pattern" (points to the top of the tweet stream).
- Callout 2:** "Find myself annoyed with web pages opening in another window" (points to a tweet by @sinequanon containing a link).
- Callout 3:** "Find myself wanting to substitute a drag for a swipe" (points to a tweet by @rashmi containing a link).

The tweets visible in the timeline include:

- sinequanon** Rowell Sotto: Great presentation on the evolution and technical acumen of Renaissance and Baroque engraving techniques. [FLASH]. <http://goo.gl/EVJYE> (1 minute ago)
- dbarradas** Daniel Barradas: Video: Floating <http://tumblr.com/x321p0zwai> (1 minute ago)
- iplayallgames** Cindy Ritzman: Dogs resting an hour before running the #lditarod yfrog.com/gz9t4zrj (3 minutes ago)
- iplayallgames** Cindy Ritzman: Mackey at the start! #lditarod yfrog.com/h0pnxxj (3 minutes ago)
- rashmi** Rashmi Sinha: Yes, I revoked that app. Go here if you were tricked: <https://twitter.com/settings/connections> (5 minutes ago)
- billwscott** Bill Scott: @rashmi Yikes. Tweet spam is so annoying. The good thing is that "the voice" of the tweet is so different than your voice it is obvious. (6 minutes ago)

At the bottom left, a status bar indicates "Canceled opening the page".

Vs Hover & Cover

Home



triptych RT @ChevyRay: Doing some final beta testing for @MattThorson's Ogmo Editor, an upcoming freeware level editor. So cool so far!

4 minutes ago via HootSuite



pixelarchitect wow, public comments are ending with the totally random "planter box" advocate

8 minutes ago via Tweetie



triptych RT @metagaming: RT @df_psu: @shapah A great interview with Temple Grandin: <http://bit.ly/aaf5GD> cheers for that one(via @shapah) cheers !

12 minutes ago via HootSuite



michaeljordan On a clear nice night : Look at the moon from binoculars or a telescope. It will blow your mind.

16 minutes ago via web



shauntrennery Amazon.com drops support for IE6 <http://j.mp/9cPSAF>

25 minutes ago via TweetDeck

Vs Hover & Cover

Home



triptych RT @ChevyRay: Doing some final beta testing for @MattThorson's Ogmo Editor, an upcoming freeware level editor. So cool so far!

4 minutes ago via HootSuite



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16 minutes ago via web



shauntrennery Amazon.com drops support for IE6 <http://j.mp/9cPSAF>

25 minutes ago via TweetDeck

Where possible replace annoying hover details with dedicated detail panes

**Keep Navigation
Simple
to Maintain Flow**

Mobile Navigation

Mobile Navigation



Mobile Navigation



Three types of iPhone navigation: Flat, Tab, Tree
- Josh Clark (Tapworthy)

Mobile Navigation



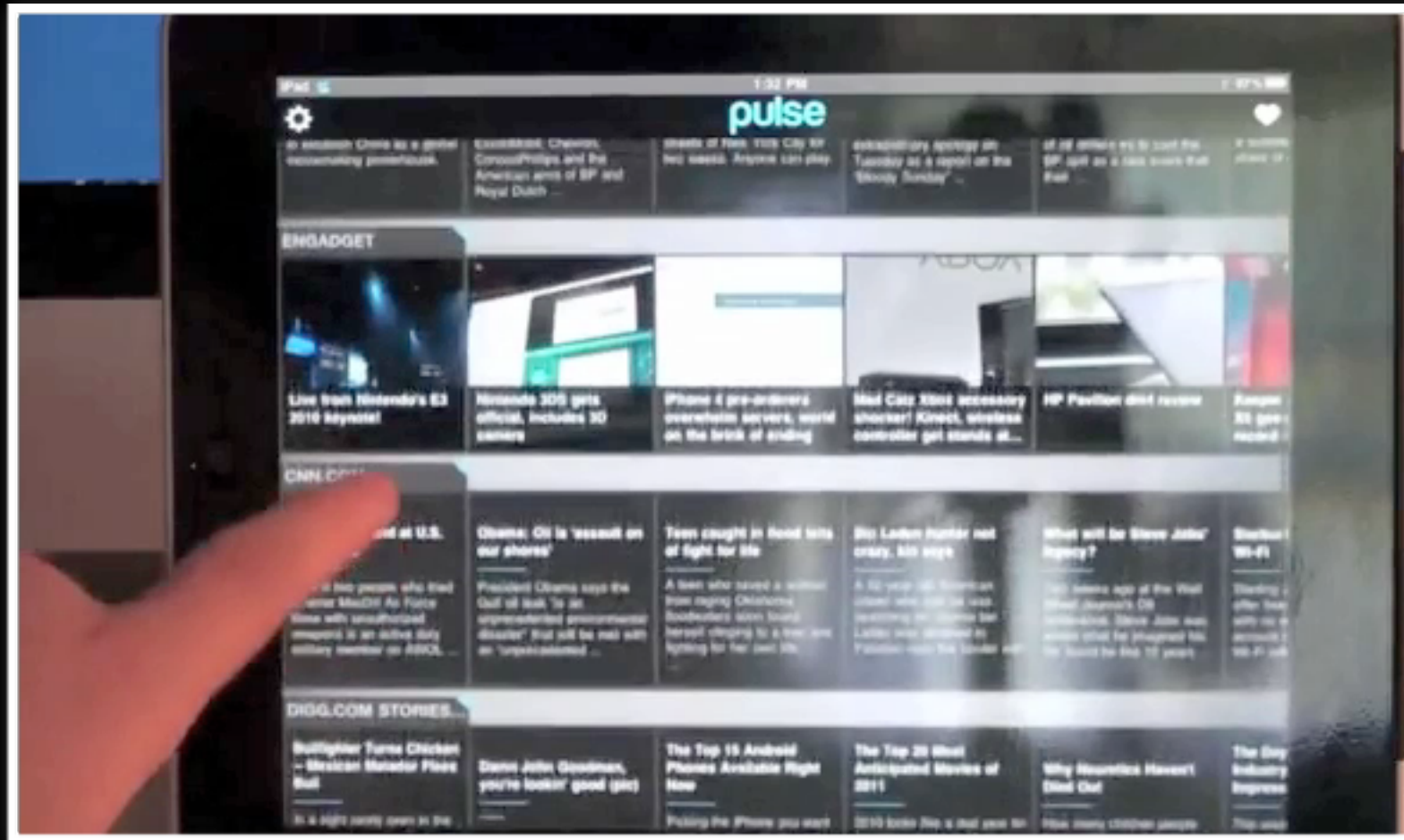
Three types of iPhone navigation: Flat, Tab, Tree
- Josh Clark (Tapworthy)



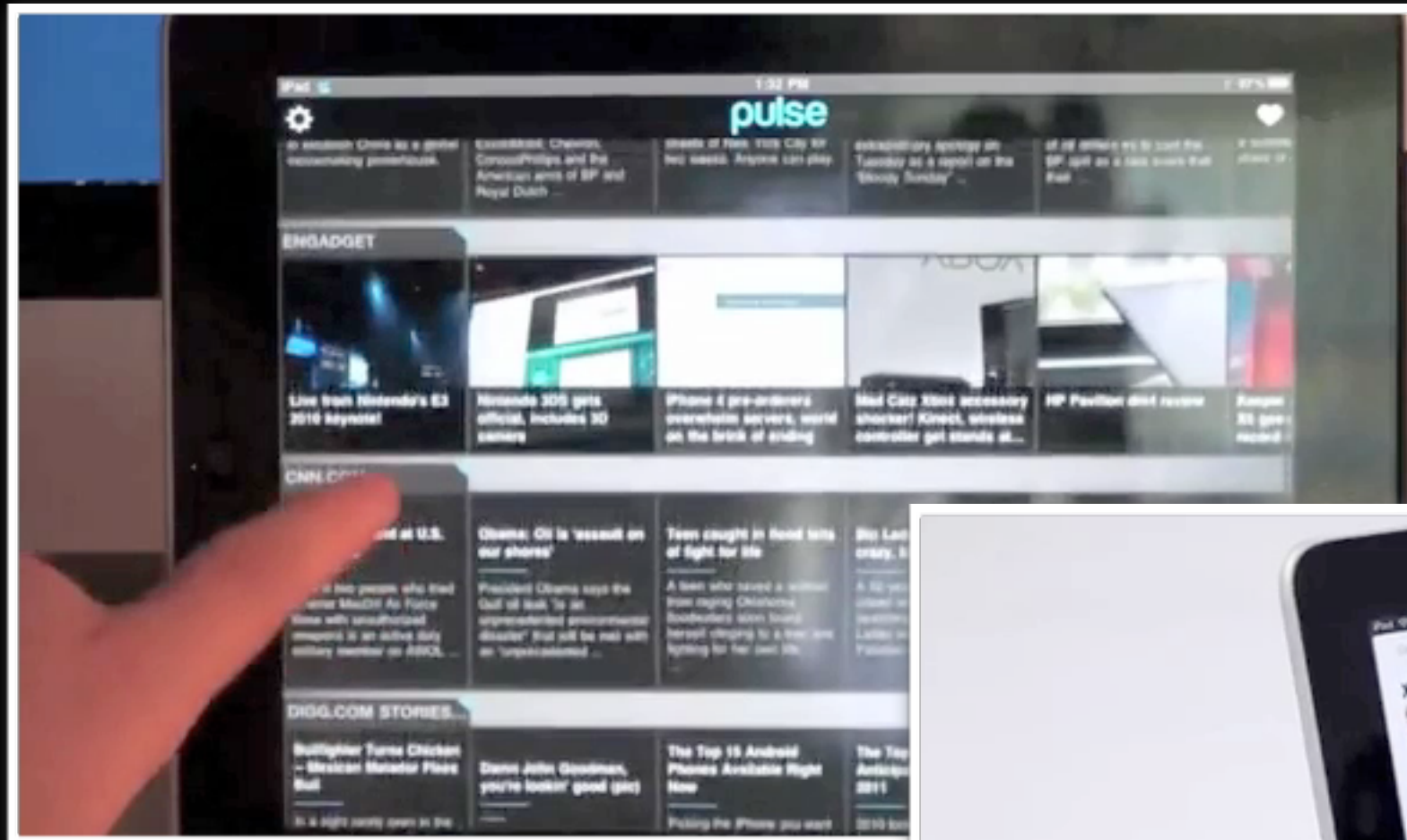
Gowalla: Tab + Flat
- Josh Clark (Tapworthy)

Source: Tapworthy by Josh Clark

Pulse & Flipboard iPad Apps



Pulse & Flipboard iPad Apps



Maintaining Flow Across Platforms

	Navigation
Web	Page, Tab, Back Button
Mobile	Flat, Tab & Tree. 1 level back.
Tablet	Flat, Tab, Master/Detail. 1 level-back
TV	Flat, Tab, Tree, Master/Detail

Maintaining Flow Across Platforms

	Navigation	Paging
Web	Page, Tab, Back Button	When page content changes or step by step flow
		Avoid too many page changes
Mobile	Flat, Tab & Tree. 1 level back.	For content, steps in flow
Tablet	Flat, Tab, Master/Detail. 1 level-back	Swiping through pages
		Avoid too many page changes
TV	Flat, Tab, Tree, Master/Detail	When page content changes or step by step flow

Maintaining Flow Across Platforms

	Navigation	Paging	Scrolling
Web	Page, Tab, Back Button	<div>When page content changes or step by step flow</div> <div>Avoid too many page changes</div>	Better than paging (easier on web than on touch)
Mobile	Flat, Tab & Tree. 1 level back.	For content, steps in flow	Question scrolling, prefer Flat
Tablet	Flat, Tab, Master/Detail. 1 level-back	<div>Swiping through pages</div> <div>Avoid too many page changes</div>	Short scrolling or for Sliding content
TV	Flat, Tab, Tree, Master/Detail	When page content changes or step by step flow	Avoid

Maintaining Flow Across Platforms

	Navigation	Paging	Scrolling	Content Slide
Web	Page, Tab, Back Button	<div>When page content changes or step by step flow</div> <div>Avoid too many page changes</div>	Better than paging (easier on web than on touch)	Carousels for media or short relevancy lists
Mobile	Flat, Tab & Tree. 1 level back.	For content, steps in flow	Question scrolling, prefer Flat	Limit use of in-page sliding content
Tablet	Flat, Tab, Master/Detail. 1 level-back	<div>Swiping through pages</div> <div>Avoid too many page changes</div>	Short scrolling or for Sliding content	Nice way to bring in more in-page content
TV	Flat, Tab, Tree, Master/Detail	When page content changes or step by step flow	Avoid	Avoid

Maintaining Flow Across Platforms

	Navigation	Paging	Scrolling	Content Slide	Panel Slide
Web	Page, Tab, Back Button	When page content changes or step by step flow Avoid too many page changes	Better than paging (easier on web than on touch)	Carousels for media or short relevancy lists	Nice way to extend real estate
Mobile	Flat, Tab & Tree. 1 level back.	For content, steps in flow	Question scrolling, prefer Flat	Limit use of in-page sliding content	Avoid (except as transition to replace page)
Tablet	Flat, Tab, Master/Detail. 1 level-back	Swiping through pages Avoid too many page changes	Short scrolling or for Sliding content	Nice way to bring in more in-page content	Nice way to extend real estate
TV	Flat, Tab, Tree, Master/Detail	When page content changes or step by step flow	Avoid	Avoid	Nice way to extend real estate



#3 Be Responsive

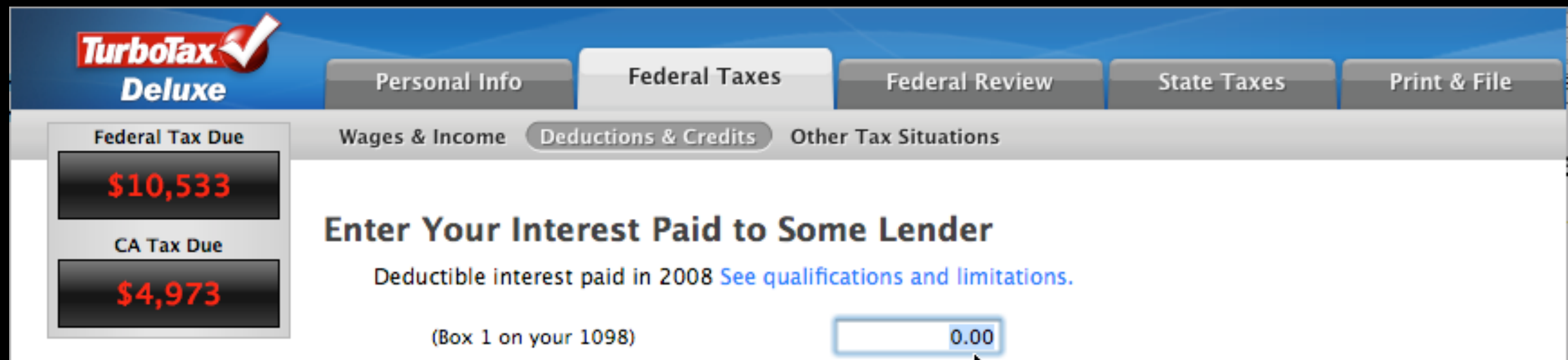
**Use Transitions/
Animations
to Create
Responsiveness**

April 1977

S	M	T	W	T	F	S
				1	2	3
				8	9	10
			6	7	15	16
	5	13	14	21	22	23
4	12	20	21	28	29	30
11	19	27				
18	26					

Animation Can...

Animation Can...



The screenshot shows the TurboTax Deluxe software interface. At the top, the TurboTax logo is on the left, and navigation tabs for 'Personal Info', 'Federal Taxes', 'Federal Review', 'State Taxes', and 'Print & File' are on the right. Below the navigation tabs, there are sub-tabs for 'Wages & Income', 'Deductions & Credits', and 'Other Tax Situations'. On the left side, a summary box displays 'Federal Tax Due' as \$10,533 and 'CA Tax Due' as \$4,973. The main content area is titled 'Enter Your Interest Paid to Some Lender' and includes a link to 'See qualifications and limitations.' Below this, a text label '(Box 1 on your 1098)' is followed by a text input field containing the value '0.00'.

TurboTax Deluxe

Personal Info Federal Taxes Federal Review State Taxes Print & File

Wages & Income Deductions & Credits Other Tax Situations

Federal Tax Due
\$10,533

CA Tax Due
\$4,973

Enter Your Interest Paid to Some Lender

Deductible interest paid in 2008 [See qualifications and limitations.](#)

(Box 1 on your 1098)

Animation Can...

The screenshot shows the TurboTax Deluxe interface. At the top, there's a navigation bar with tabs: Personal Info, Federal Taxes (selected), Federal Review, State Taxes, and Print & File. Below this, there's a sub-navigation bar with tabs: Wages & Income, Deductions & Credits (selected), and Other Tax Situations. On the left side, there's a summary box showing 'Federal Tax Due' as \$10,533 and 'CA Tax Due' as \$4,973. The main area is titled 'Enter Your Interest Paid to Some Lender' with a subtitle 'Deductible interest paid in 2008 See qualifications and limitations.' Below this, there's a text input field labeled '(Box 1 on your 1098)' with the value '0.00' entered.

TurboTax Deluxe

Personal Info | **Federal Taxes** | Federal Review | State Taxes | Print & File

Wages & Income | **Deductions & Credits** | Other Tax Situations

Federal Tax Due
\$10,533

CA Tax Due
\$4,973

Enter Your Interest Paid to Some Lender
Deductible interest paid in 2008 [See qualifications and limitations.](#)

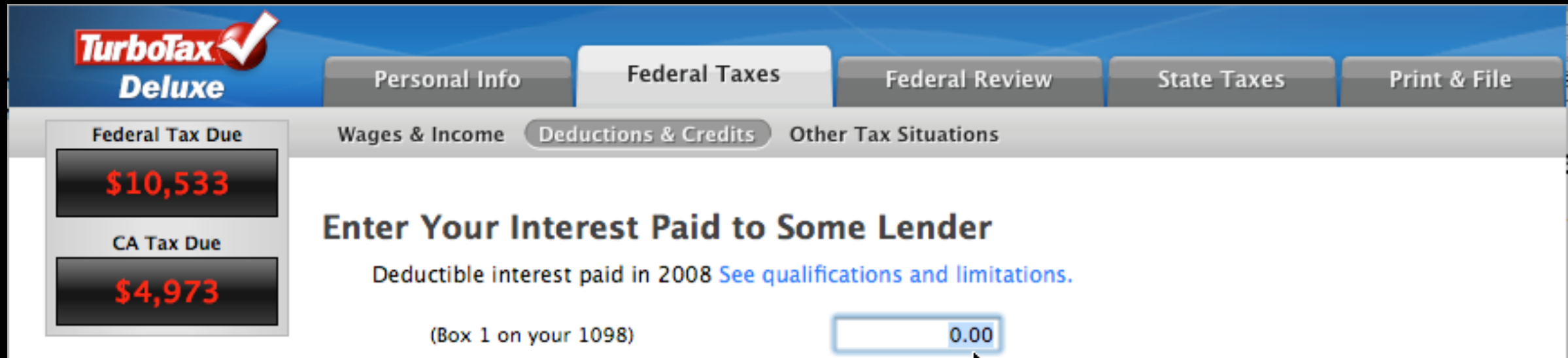
(Box 1 on your 1098)

This is a close-up of the summary box from the previous screenshot. It shows 'Federal Tax Due' as \$10,533 and 'CA Tax Due' as \$4,973. The numbers are displayed in large, bold, red font on a dark gray background.

Federal Tax Due
\$10,533

CA Tax Due
\$4,973

Animation Can...



The screenshot shows the TurboTax Deluxe interface. At the top, there are tabs for 'Personal Info', 'Federal Taxes' (selected), 'Federal Review', 'State Taxes', and 'Print & File'. Below these are sub-tabs for 'Wages & Income', 'Deductions & Credits' (selected), and 'Other Tax Situations'. On the left, a summary box shows 'Federal Tax Due' as \$10,533 and 'CA Tax Due' as \$4,973. The main area has a heading 'Enter Your Interest Paid to Some Lender' with a subtext 'Deductible interest paid in 2008 [See qualifications and limitations.](#)'. Below this is a text input field labeled '(Box 1 on your 1098)' containing the value '0.00'.

TurboTax Deluxe

Personal Info | **Federal Taxes** | Federal Review | State Taxes | Print & File

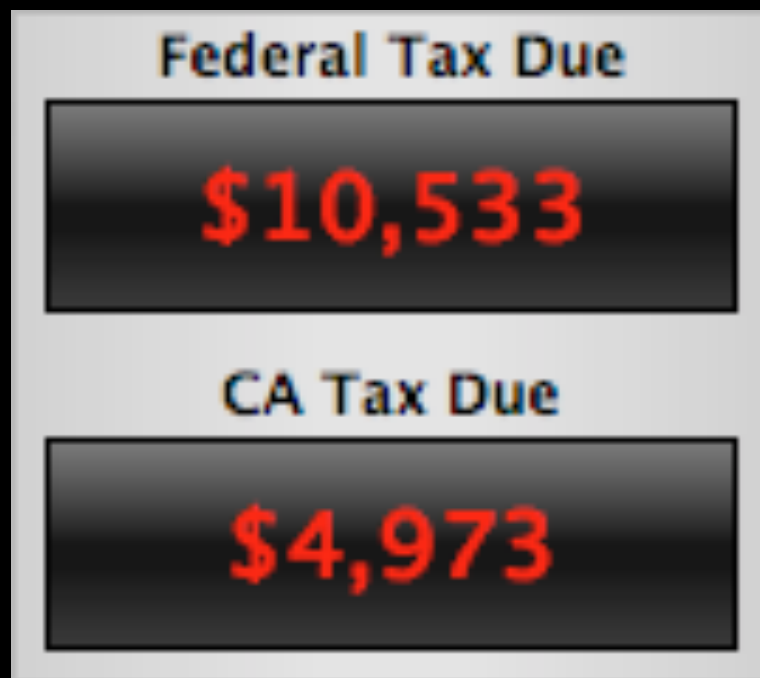
Wages & Income | **Deductions & Credits** | Other Tax Situations

Federal Tax Due
\$10,533

CA Tax Due
\$4,973

Enter Your Interest Paid to Some Lender
Deductible interest paid in 2008 [See qualifications and limitations.](#)

(Box 1 on your 1098)



This is a close-up of the summary box from the TurboTax interface, showing the calculated tax amounts.

Federal Tax Due
\$10,533

CA Tax Due
\$4,973



nbc.com

upc.com

Animation Can...

Be really, really
annoying

TurboTax Deluxe

Personal Info Federal Taxes Federal Review State Taxes Print & File

Wages & Income Deductions & Credits Other Tax Situations

Federal Tax Due
\$10,533

CA Tax Due
\$4,973

Enter Your Interest Paid to Some Lender
Deductible interest paid in 2008 [See qualifications and limitations.](#)

(Box 1 on your 1098)

Federal Tax Due
\$10,533

CA Tax Due
\$4,973



What can be done with less is
done in vain with more.

- Occam

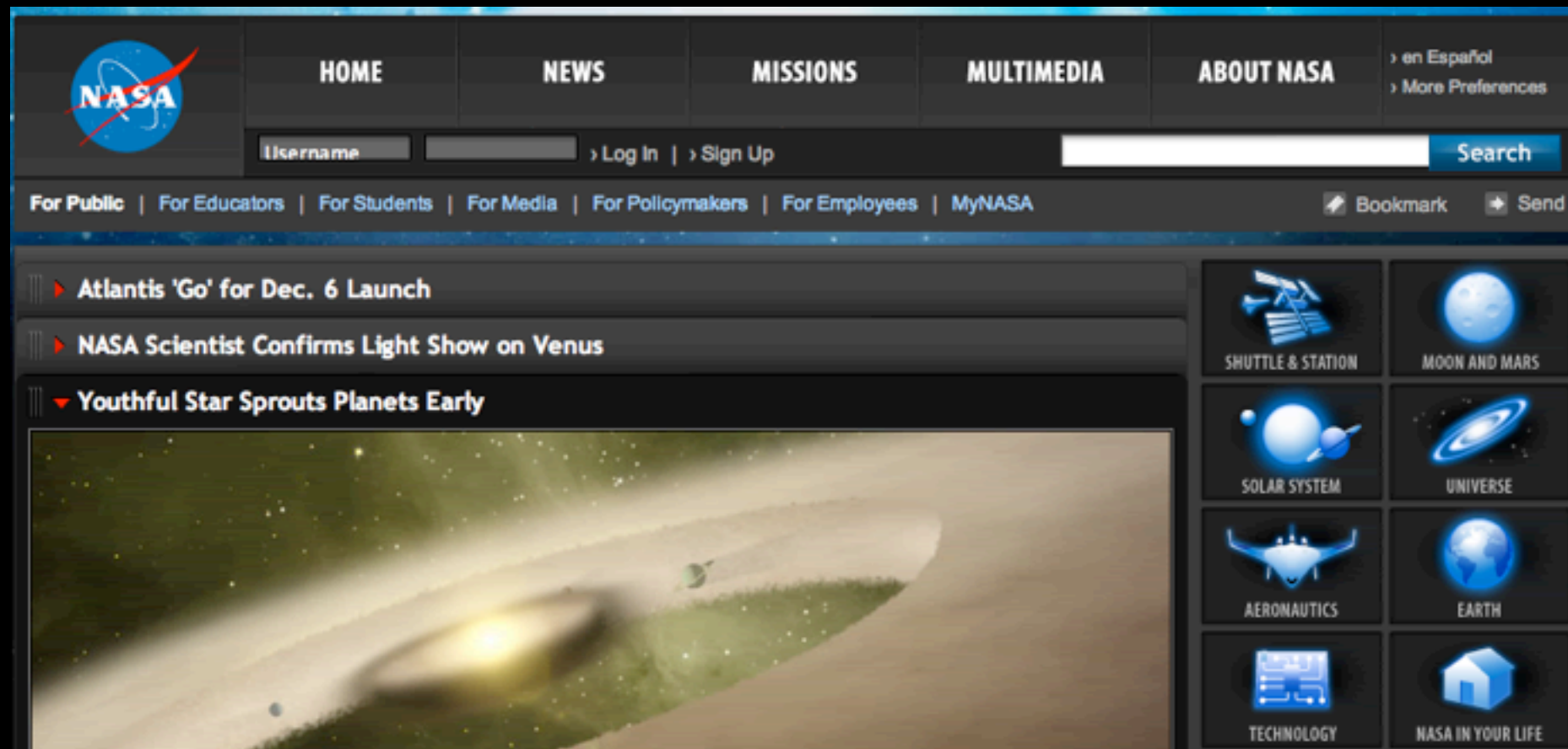
Make all visual distinctions as
subtle as possible, but still clear
and effective.

- Tufte "Smallest Effective Difference"

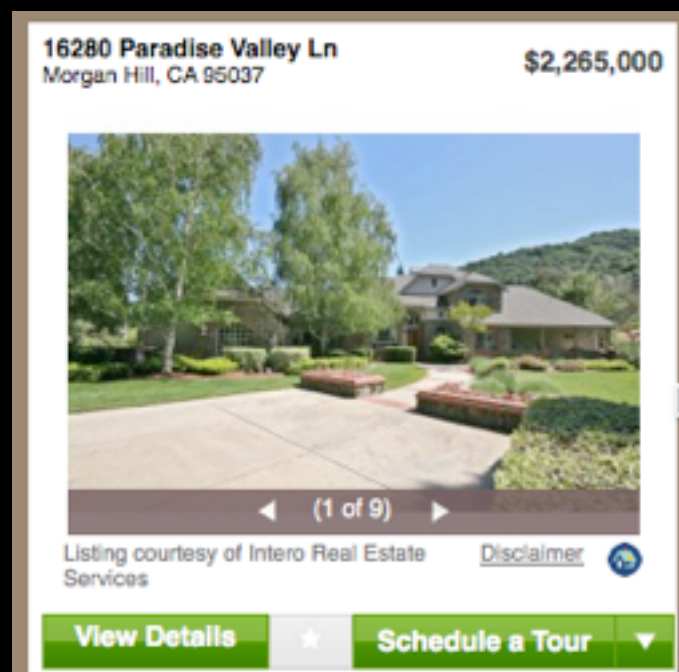
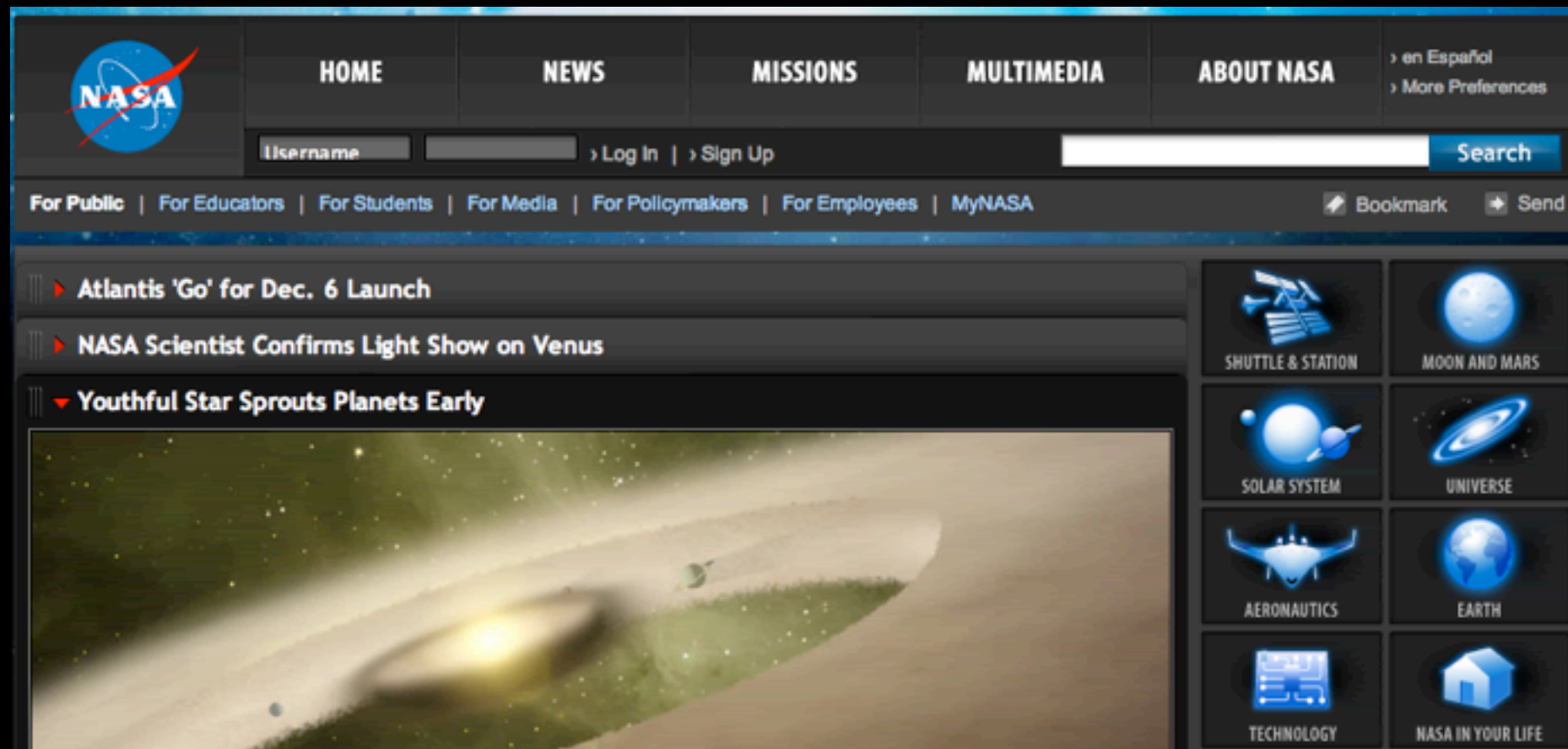
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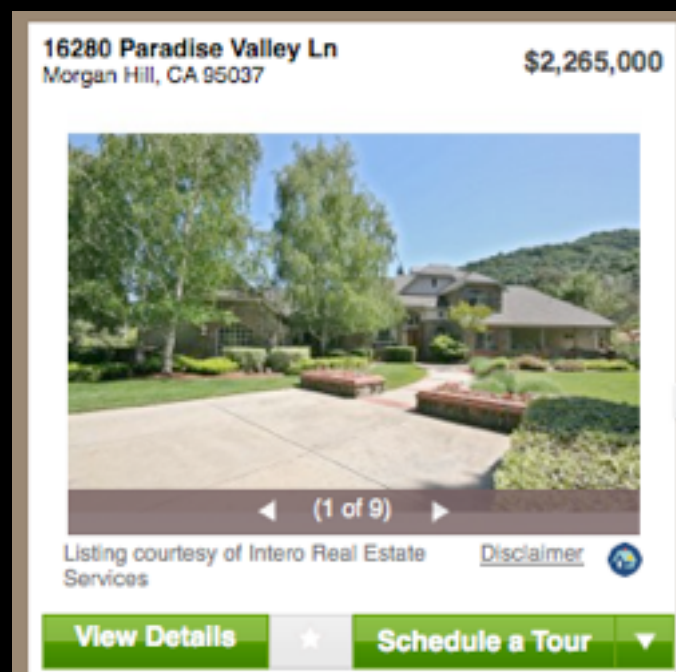
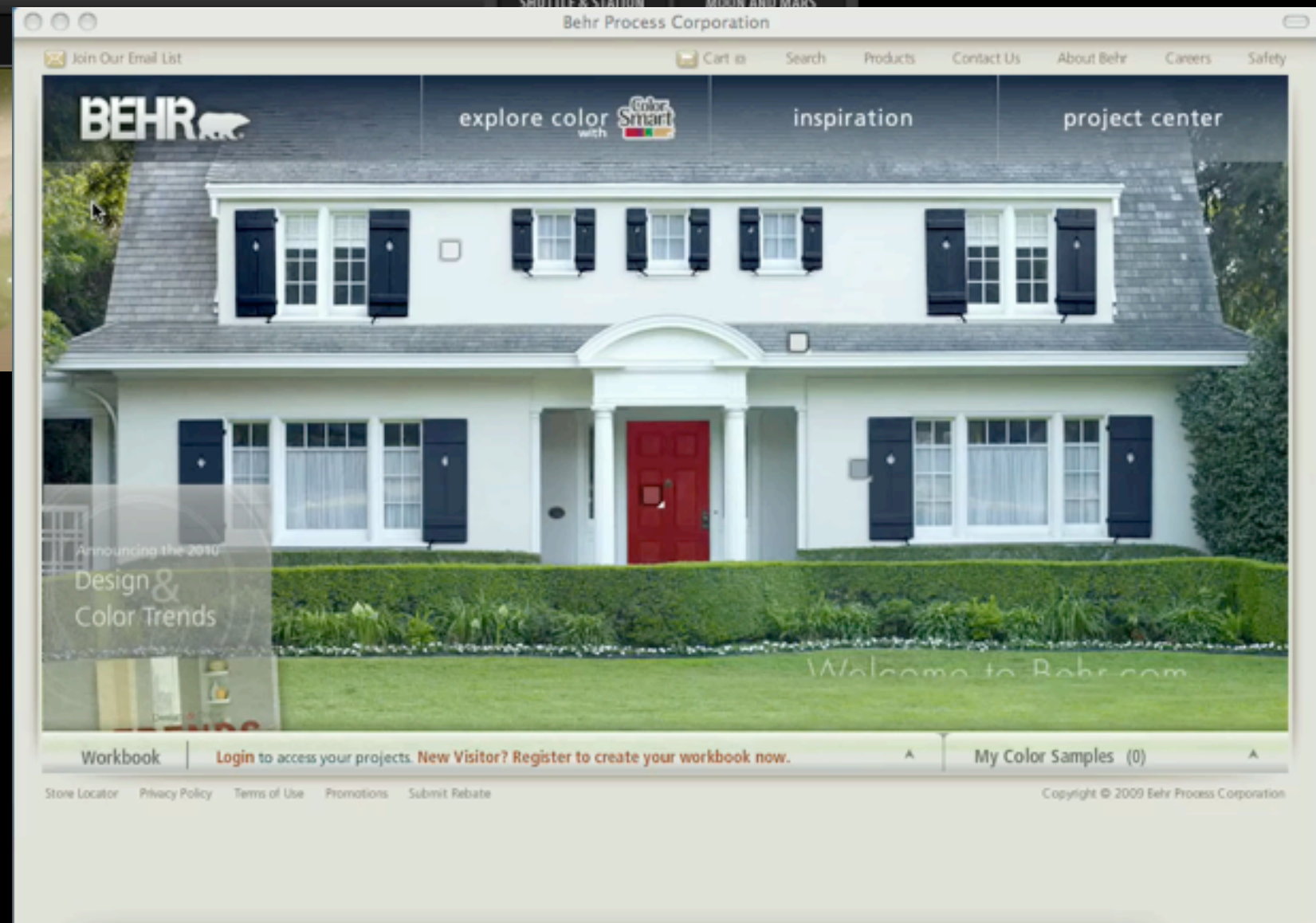
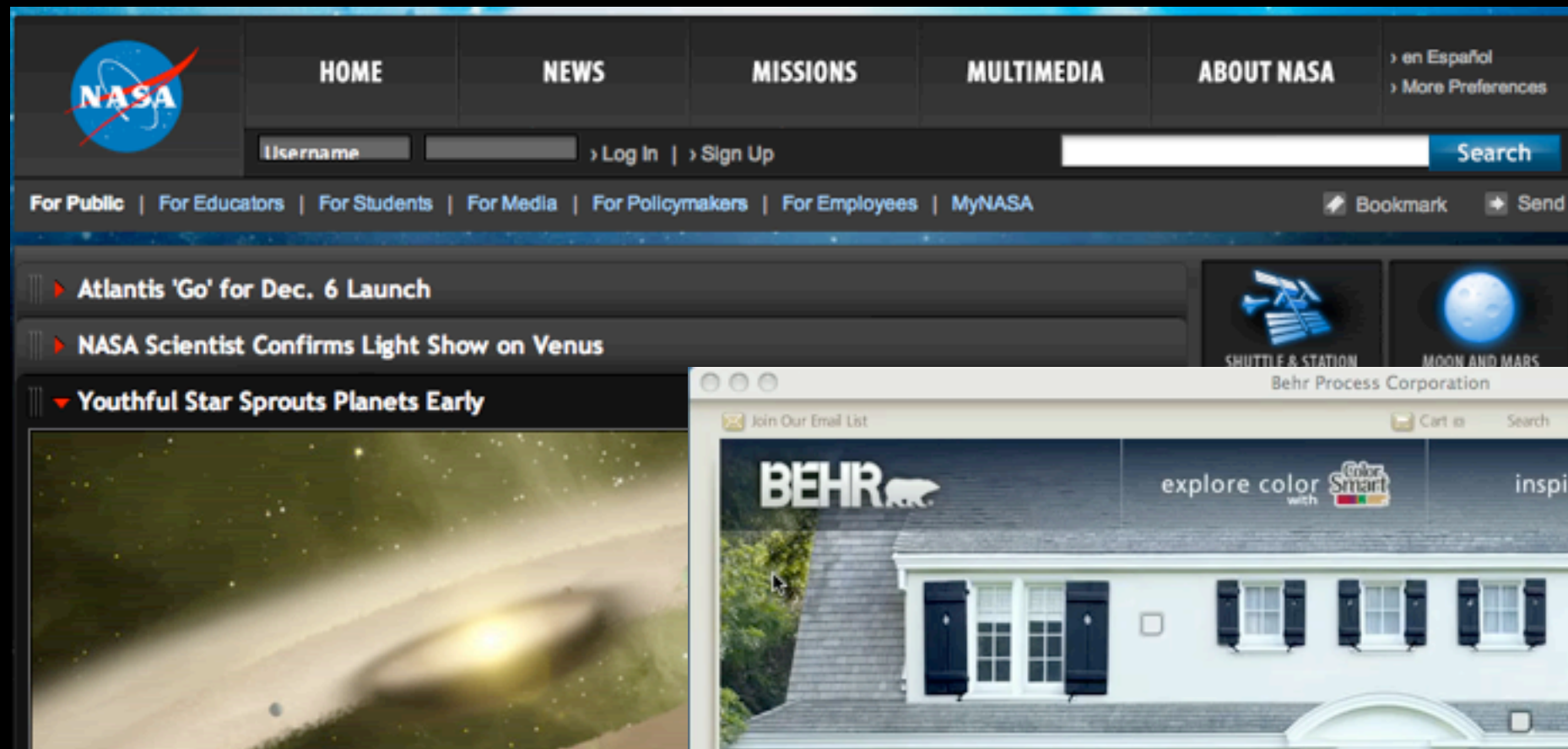
Web Apps Seem Prone to This



Web Apps Seem Prone to This

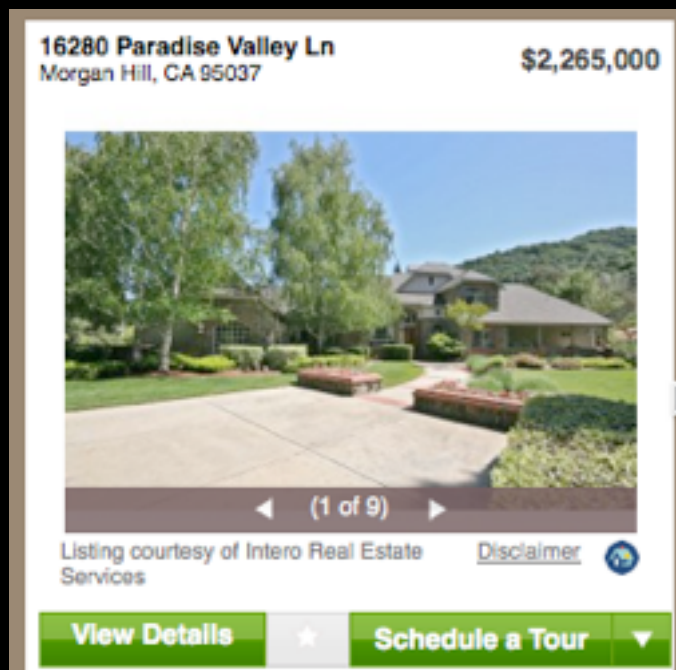
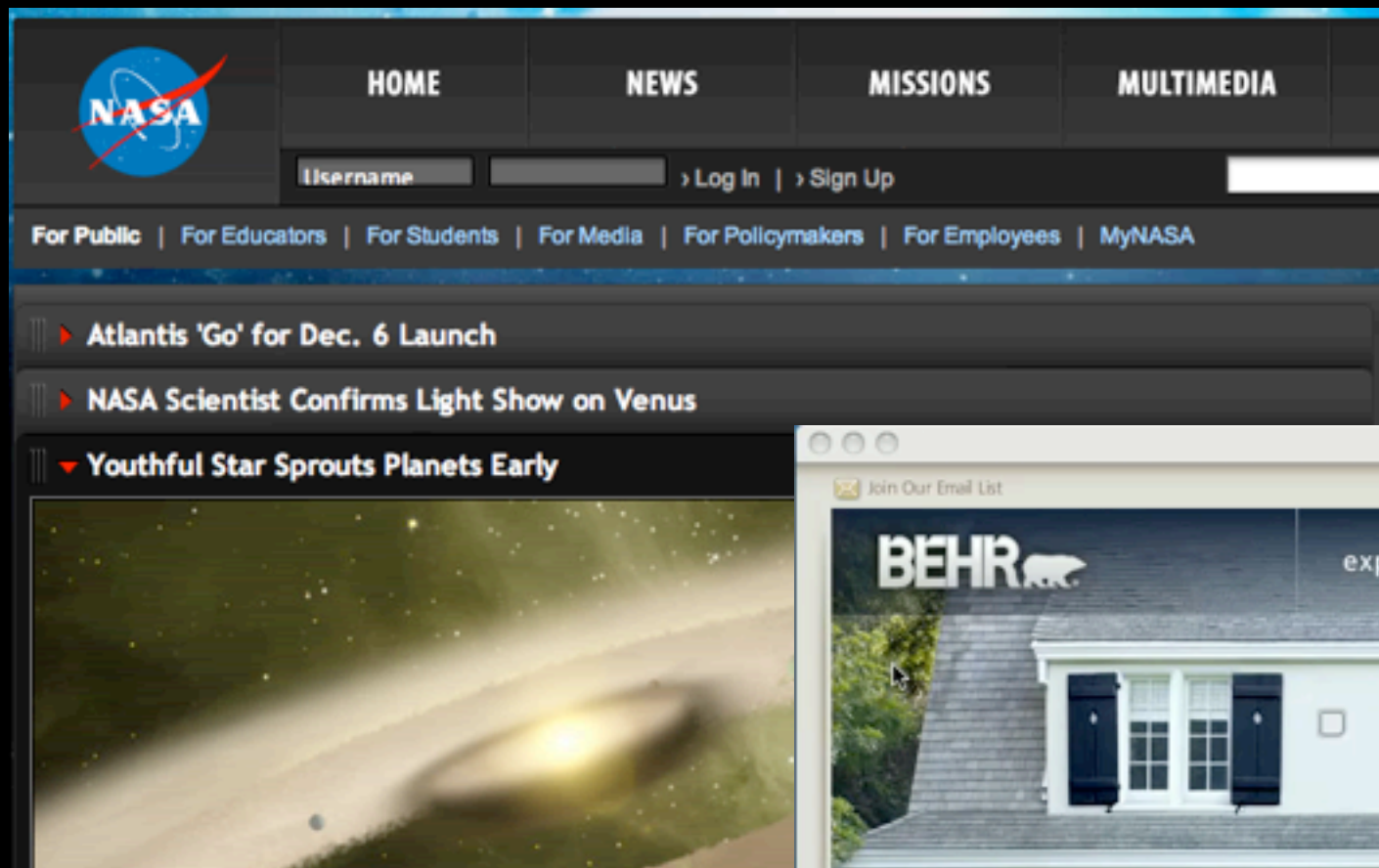


Web Apps Seem Prone to This

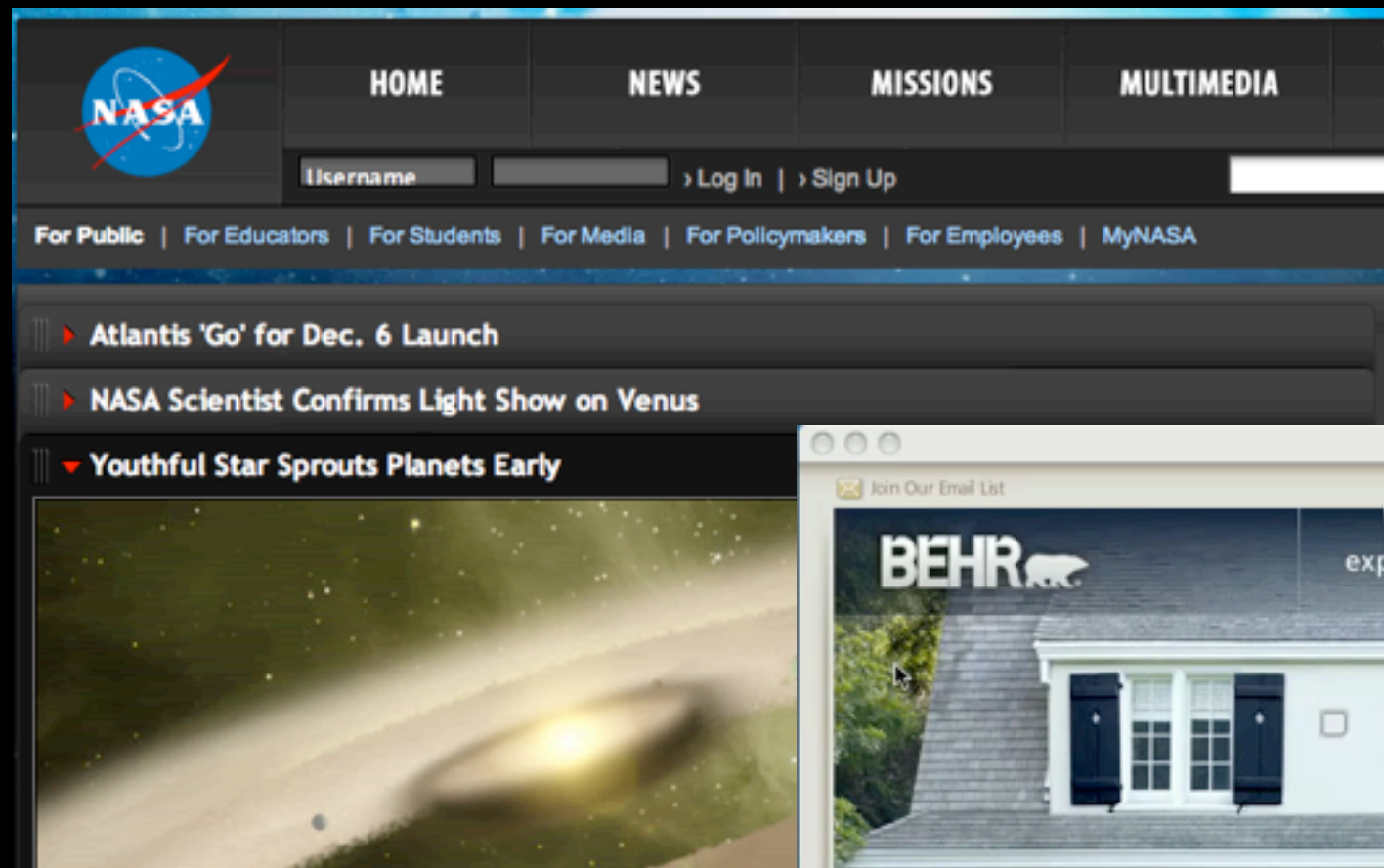


Web Apps Seem Prone to This

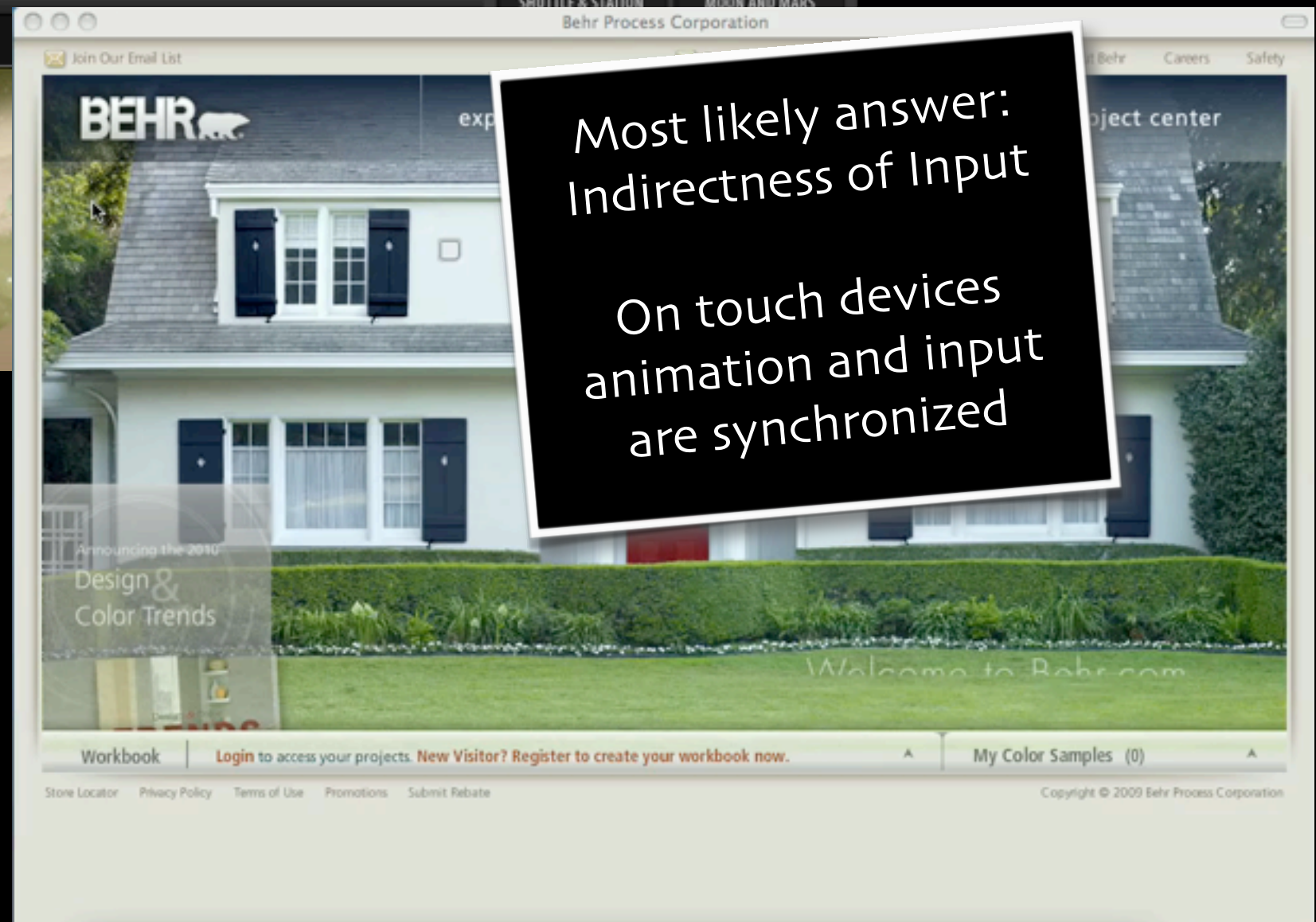
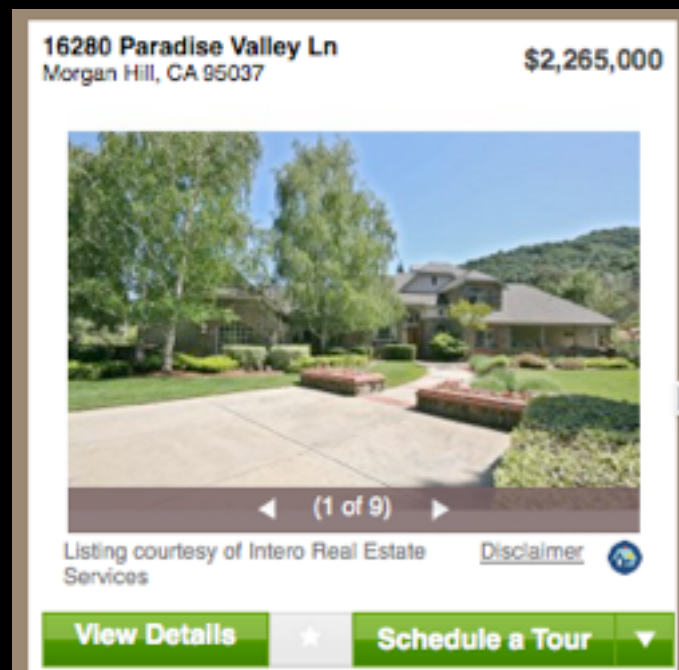
Snarky answer: Blame it on Flash :-)



Web Apps Seem Prone to This



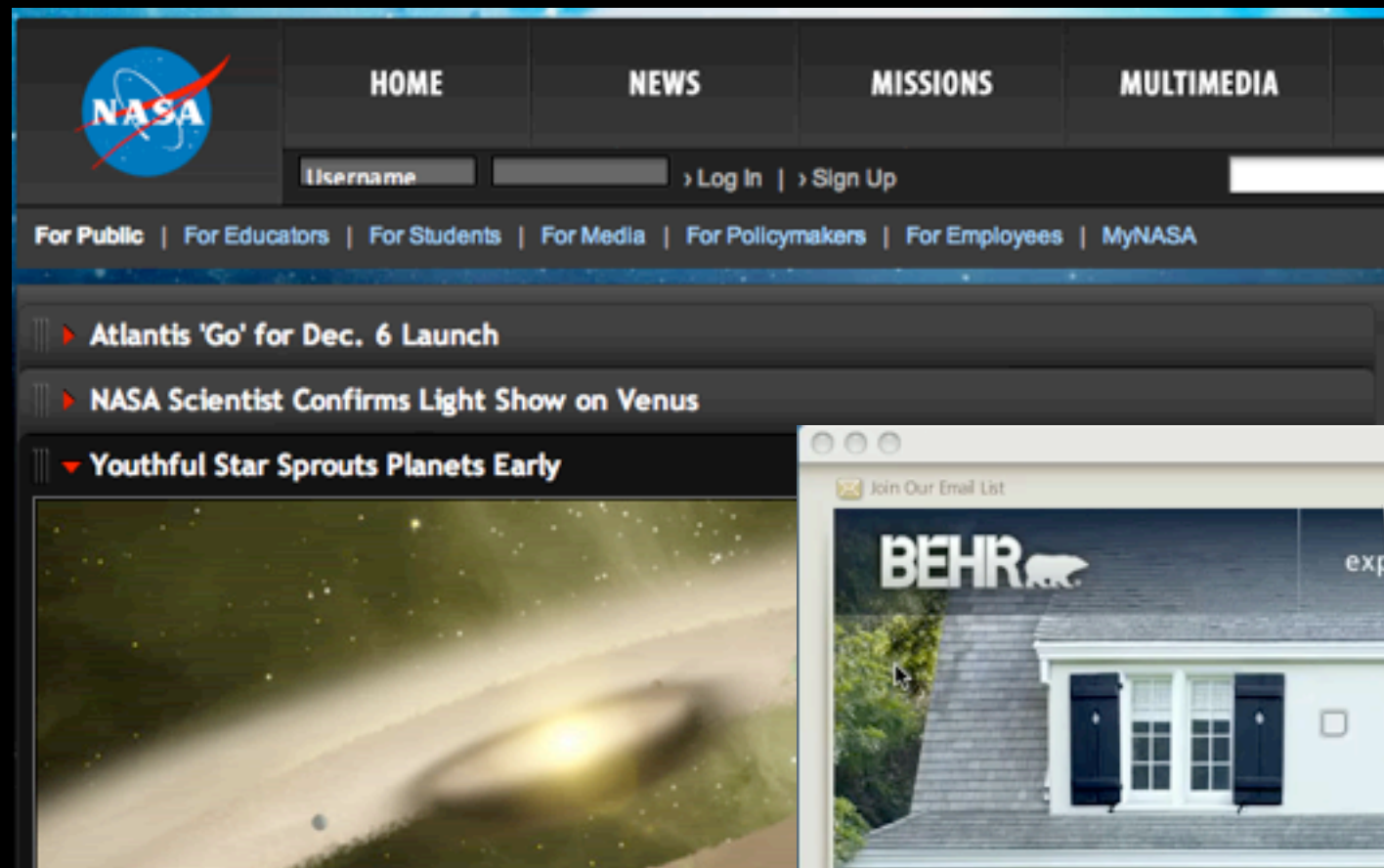
Snarky answer: Blame it on Flash :-)



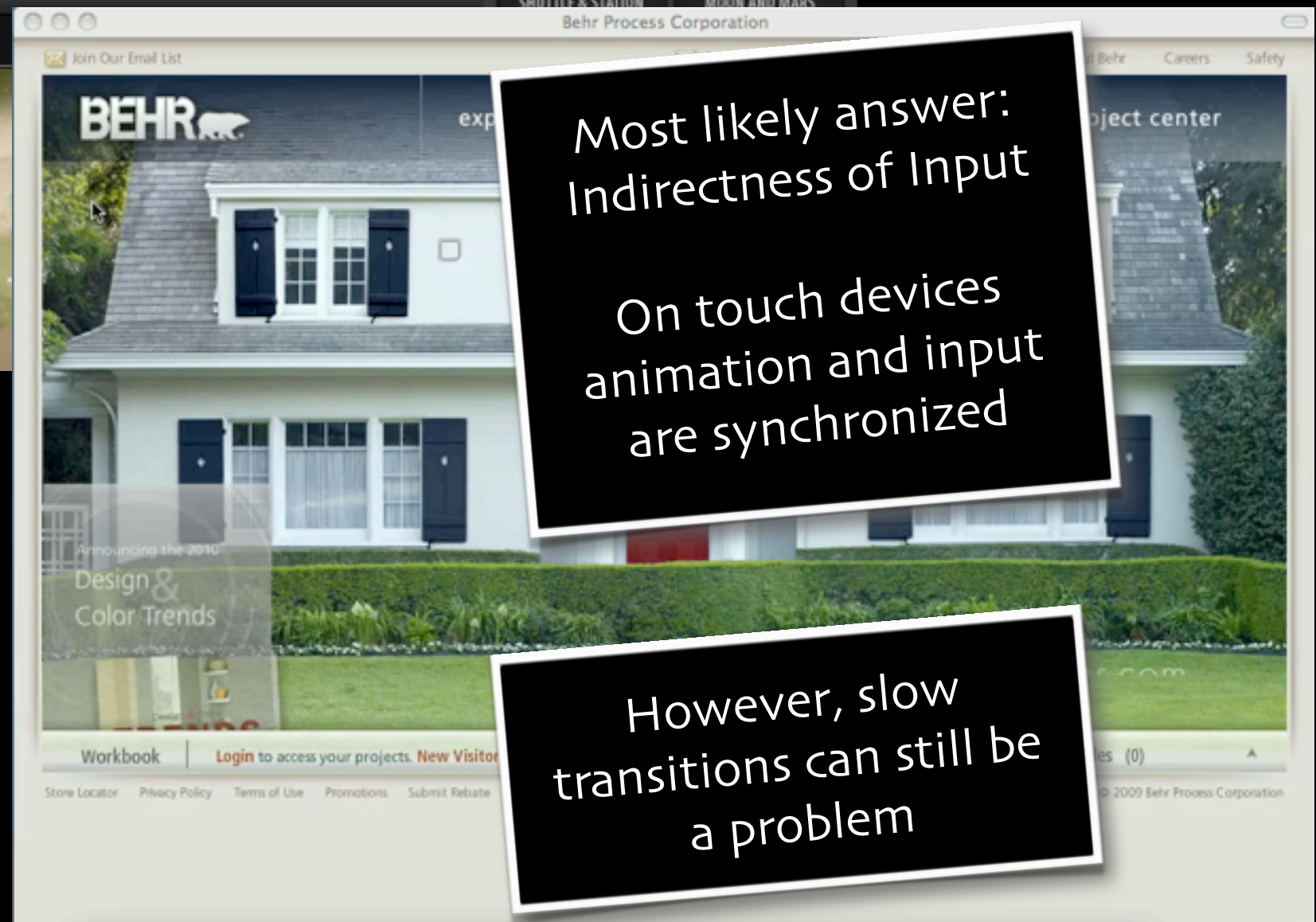
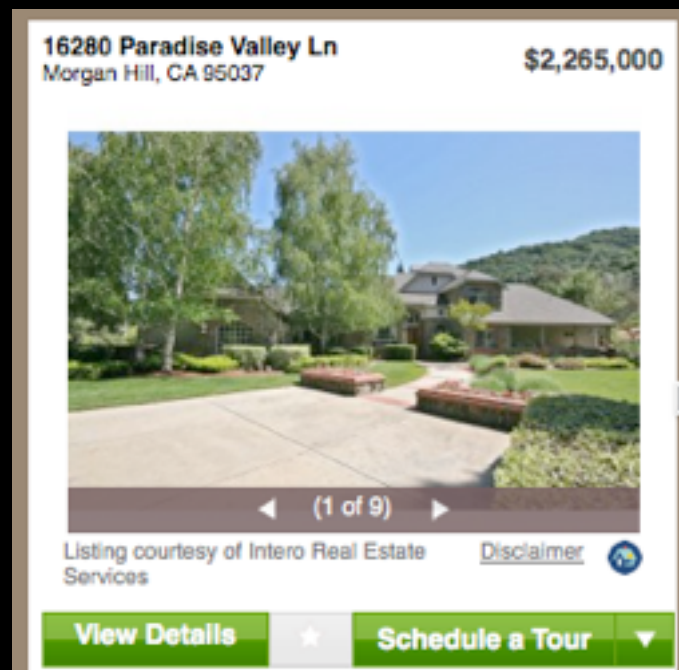
Most likely answer: Indirectness of Input

On touch devices animation and input are synchronized

Web Apps Seem Prone to This



Snarky answer: Blame it on Flash :-)



Most likely answer: Indirectness of Input

On touch devices animation and input are synchronized

However, slow transitions can still be a problem

Animation Can...



Animation Can...

Reveal relationships



Animation Can...

Reveal relationships

Improve
responsiveness

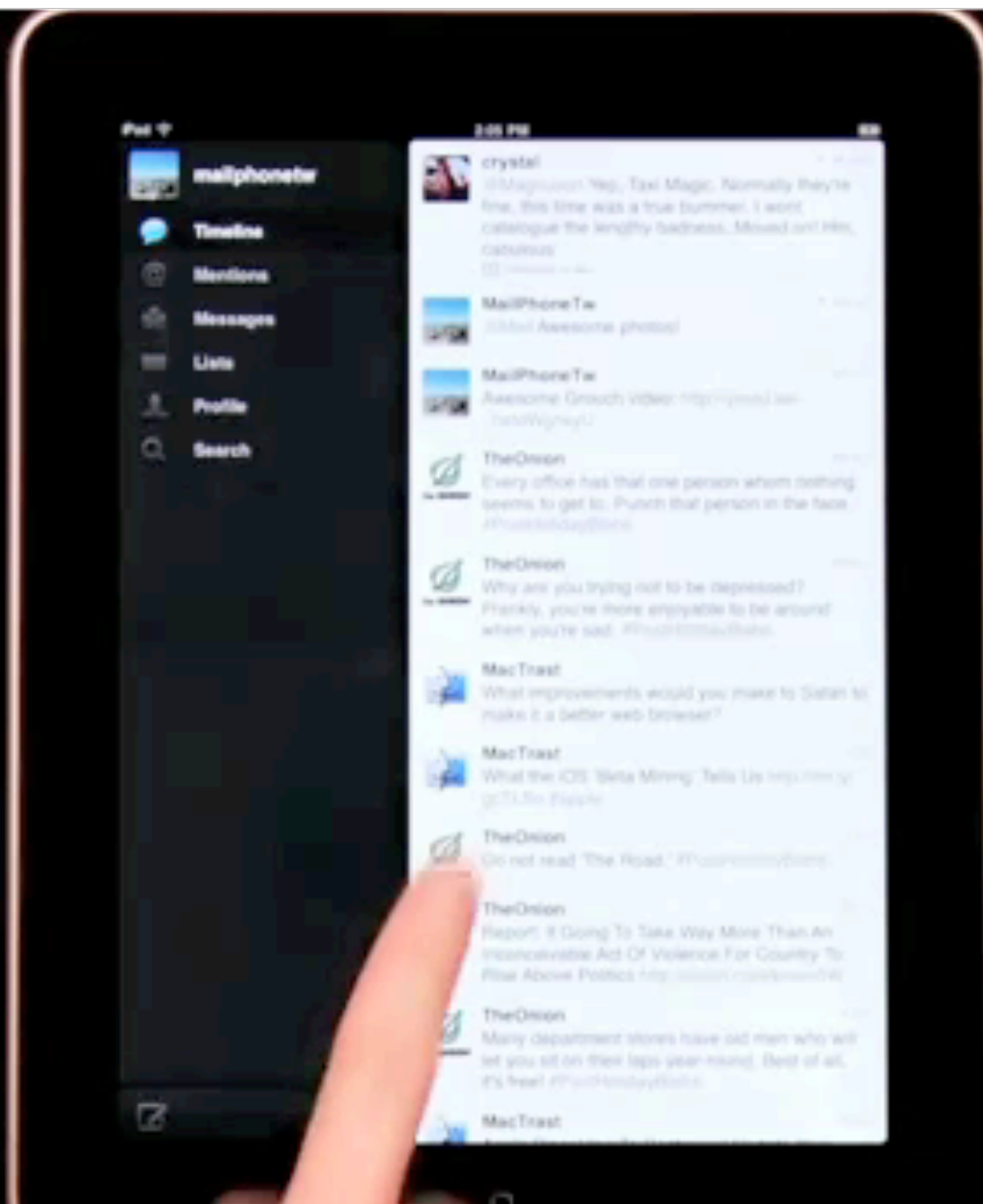


Animation Can...

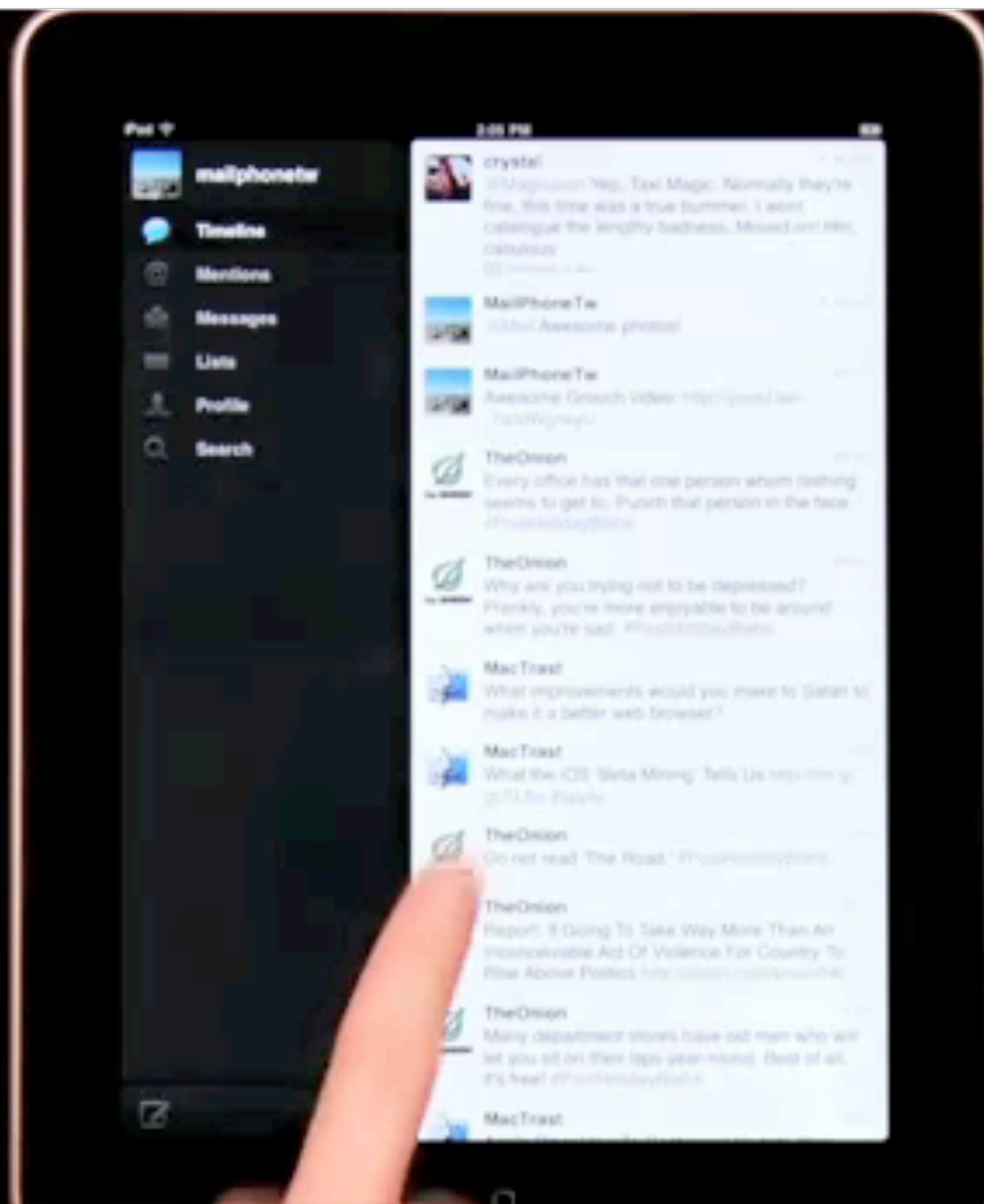
Reveal relationships

Improve
responsiveness

Show state change



Animation Can...



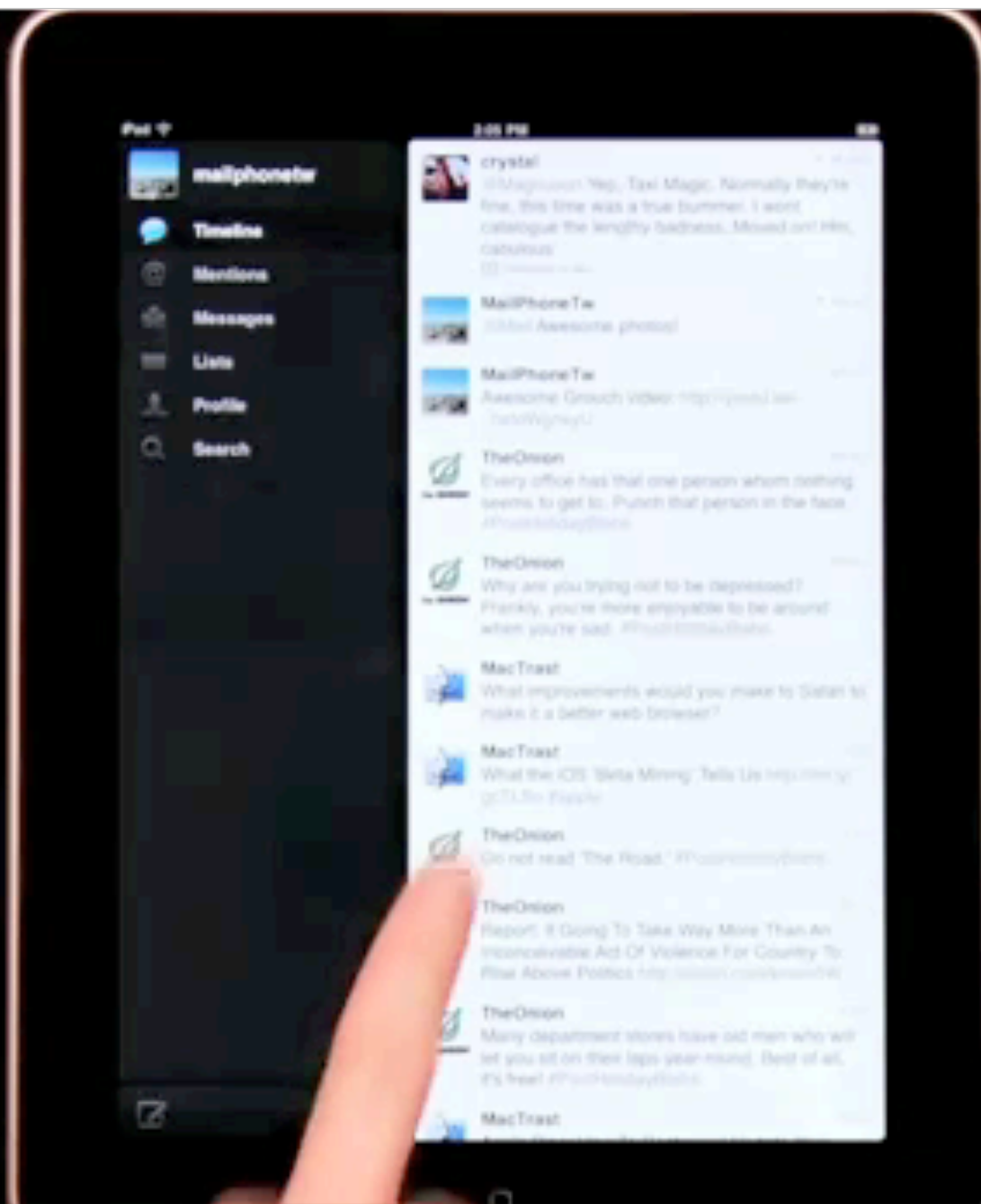
Reveal relationships

Improve
responsiveness

Show state change

Focus attention

Animation Can...



Reveal relationships

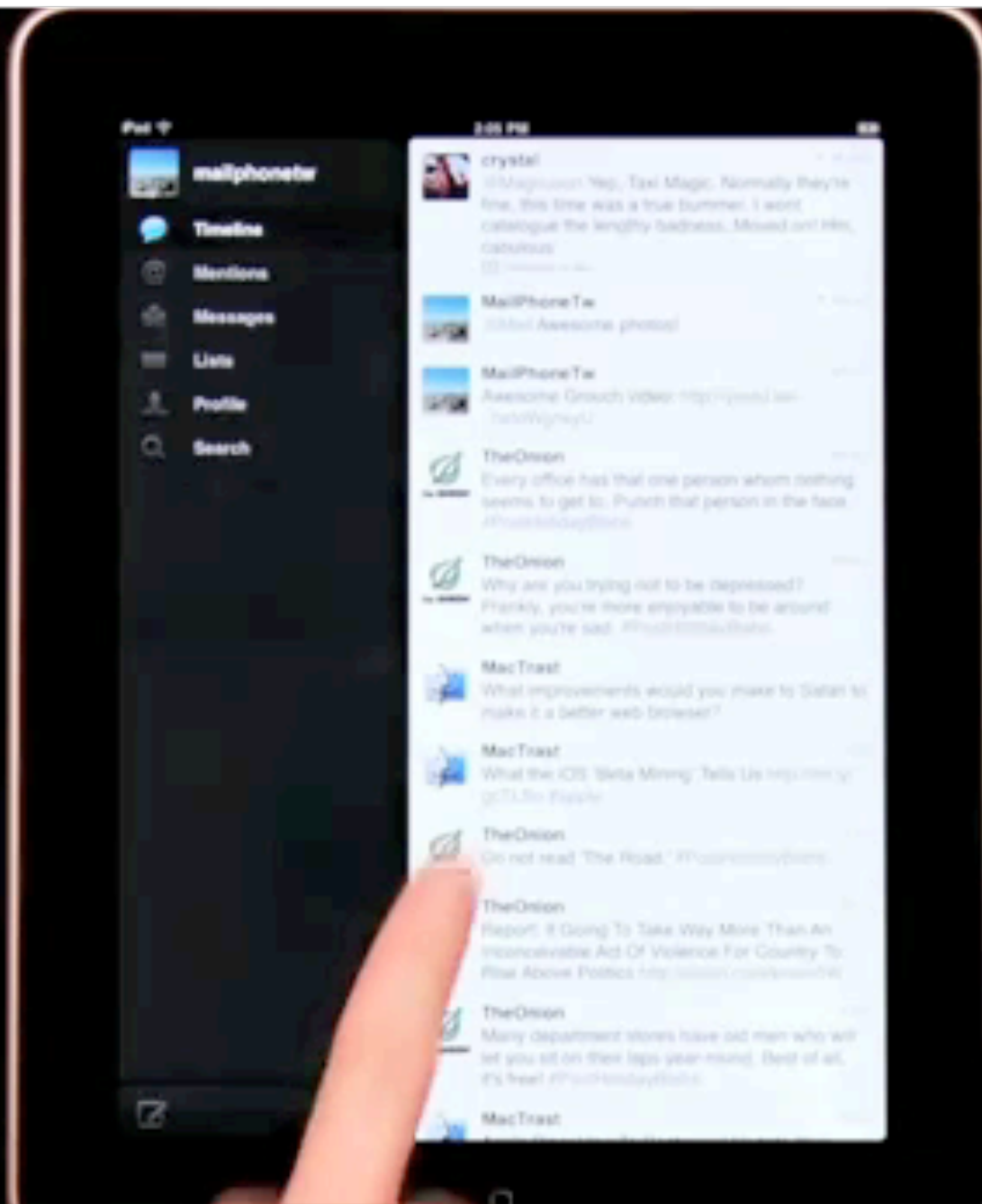
Improve
responsiveness

Show state change

Focus attention

Create delight

Animation Can...



Reveal relationships

Improve
responsiveness

Show state change

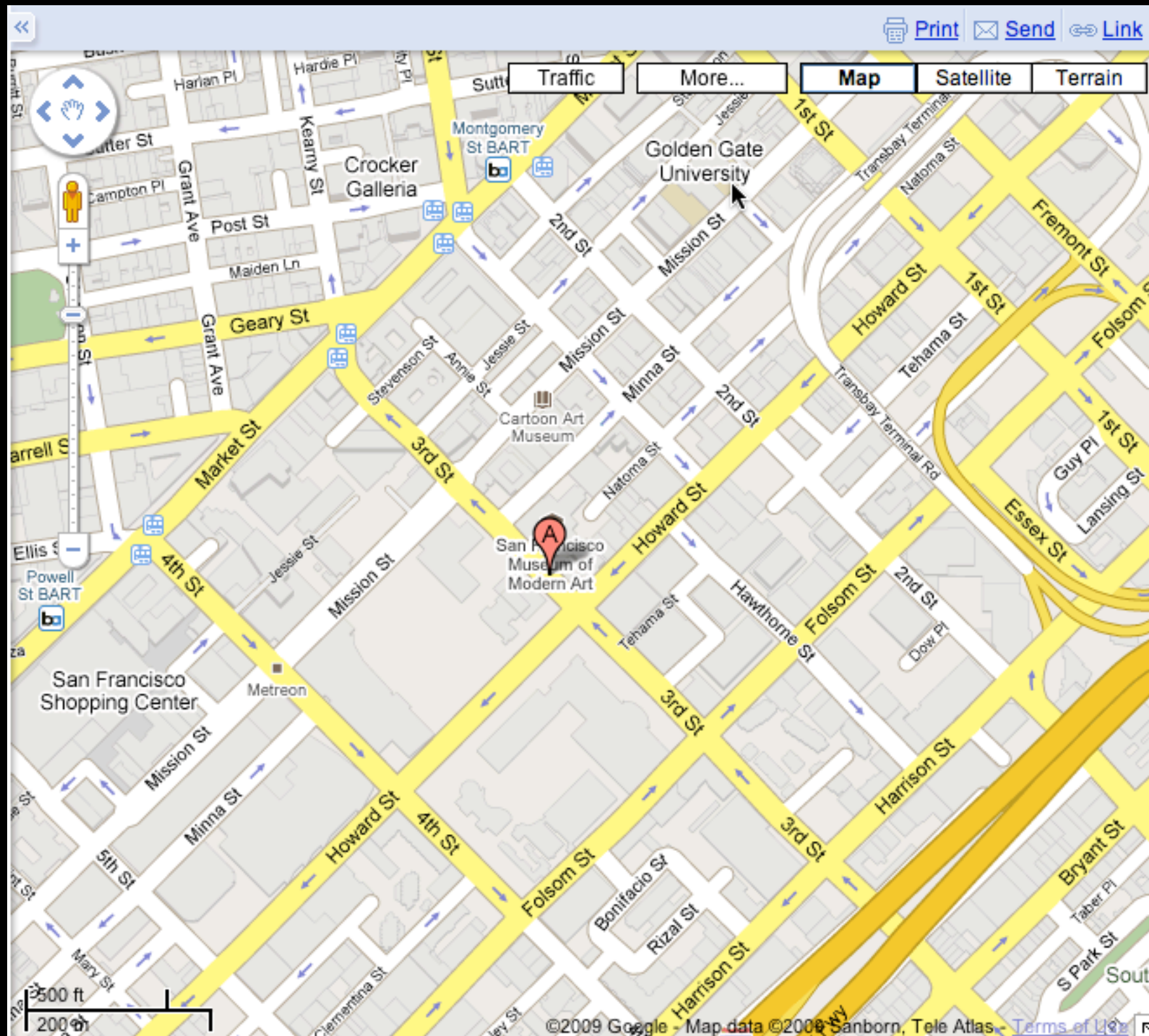
Focus attention

Create delight

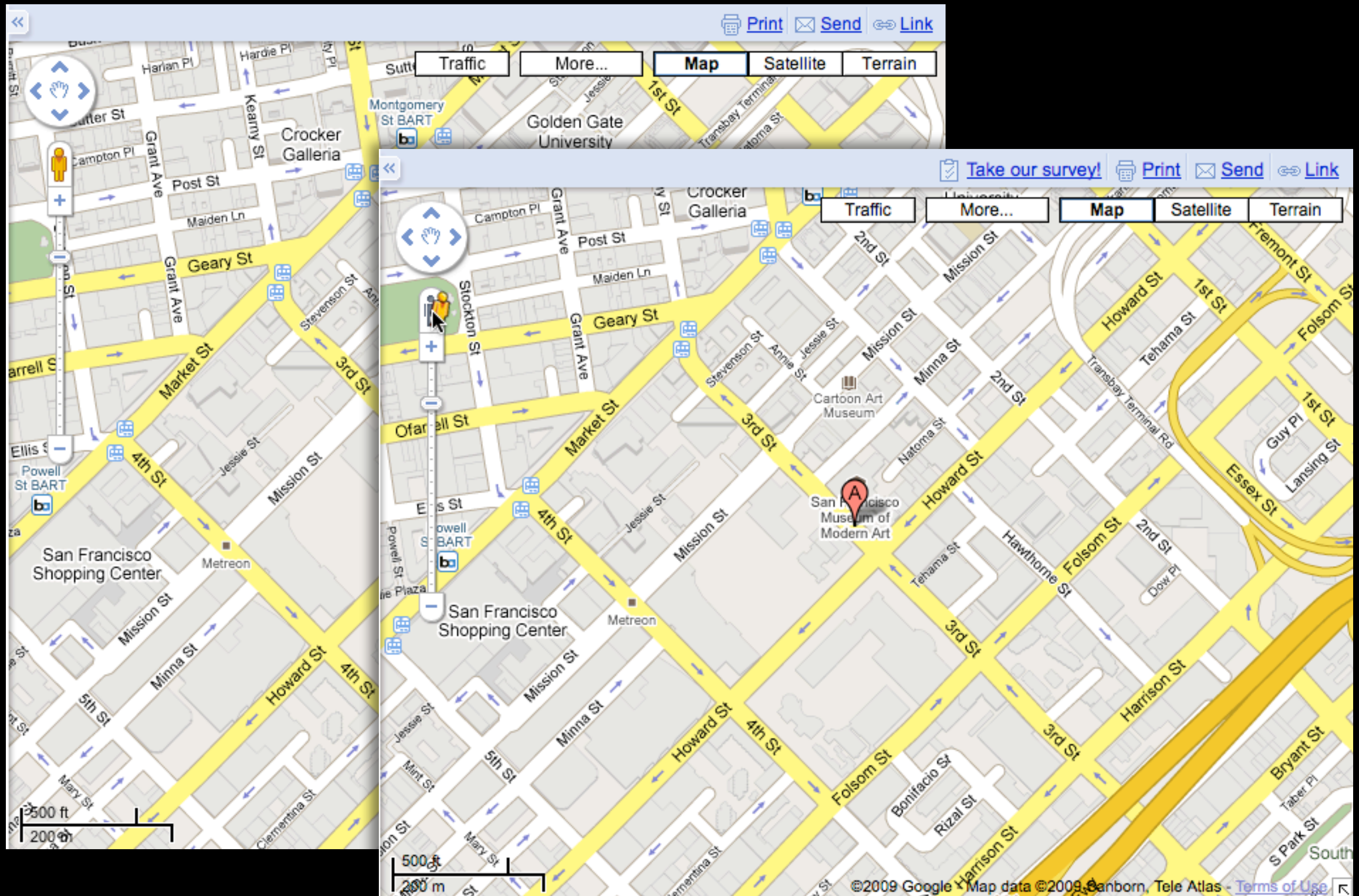
Simulate physicality

Use Invitations
to Create
Responsiveness

Just in Time Invitations at Drag Moments




Just in Time Invitations at Drag Moments




Invitations at Reward Moments

Invitations at Reward Moments

Close 

Rate Your Recent Return

OCEAN'S THIRTEEN



★ ★ ★ ★ ☆

No Opinion

RATE TO REVEAL...
...2 MOVIES YOU'LL LOVE

1

Add

★ ★ ★ ★ ☆

Not Interested

2


Add

★ ★ ★ ★ ☆


Not Interested

(click the stars)

Invitations at Reward Moments

Close 

Rate Your Recent Return



OCEAN'S THIRTEEN

RATE TO REVEAL...
...2 MOVIES YOU'LL LOVE

1 2

Add Add

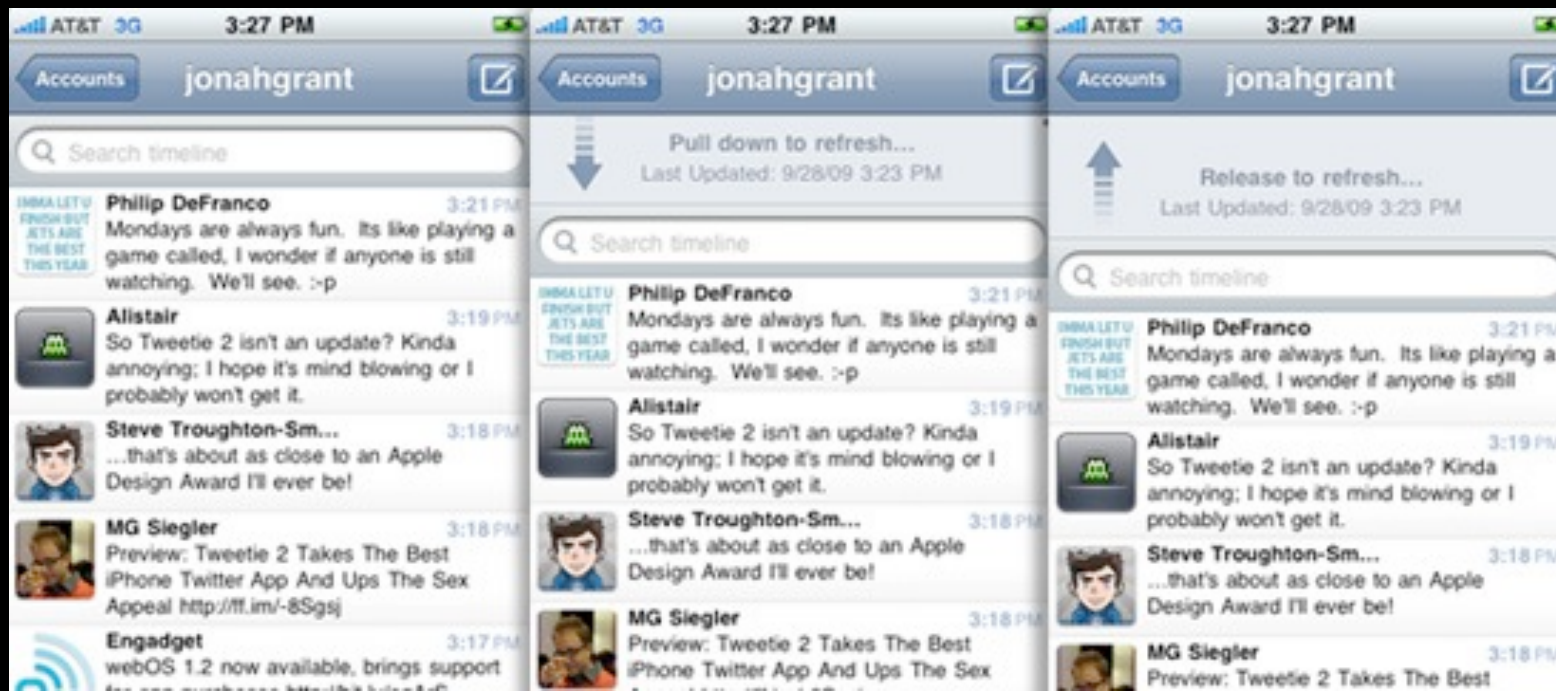
☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

Not Interested Not Interested

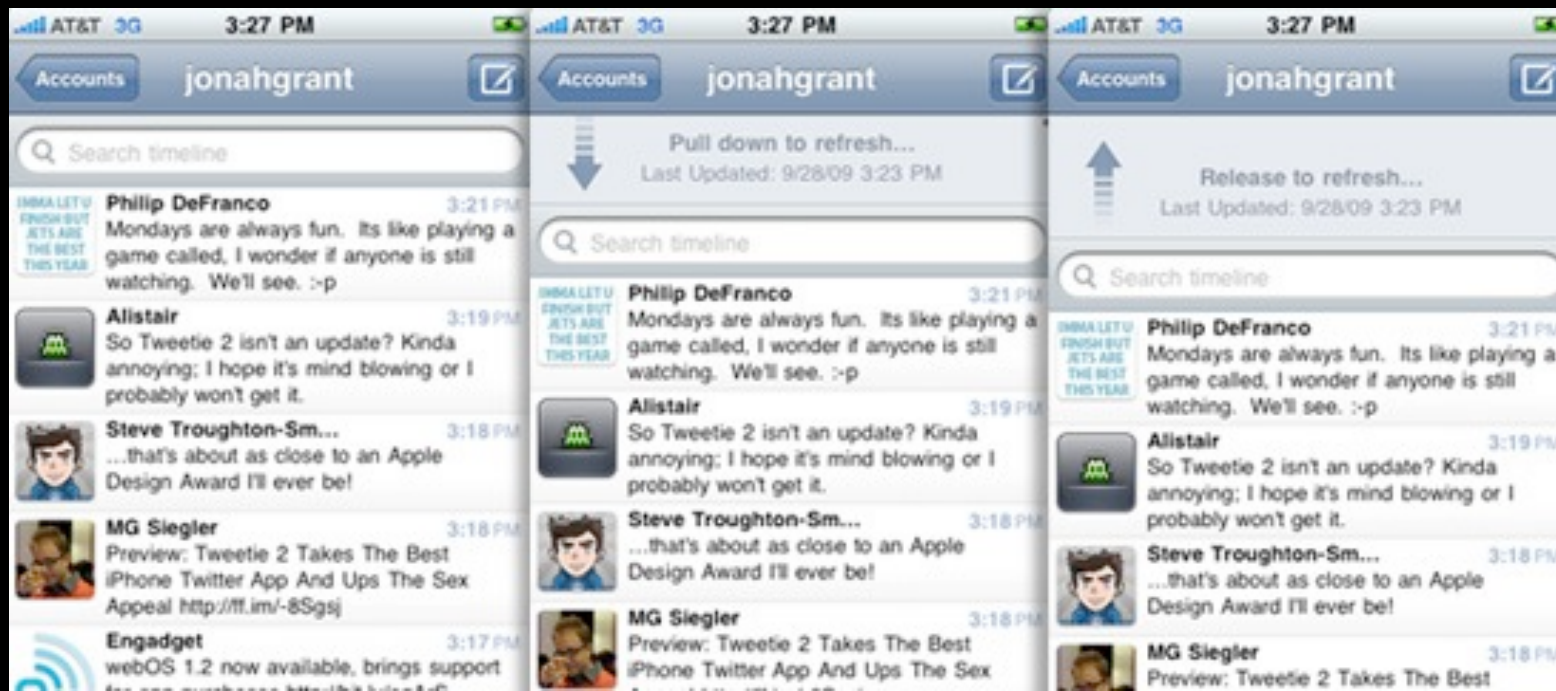
(click the stars)

Major source of
obtaining ratings

Mobile Invitations at Touch-Hold Moments



Mobile Invitations at Touch-Hold Moments



Content as an Invitation

Content as an Invitation

NETFLIX

2 / 332

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Bella

2006 PG-13 1h 31m



Two lost souls -- Nina, a pregnant, unmarried waitress, and Jose, an introspective cook with a tragic past -- find solace in each other as their lives become unpredictably linked throughout the course of one incredible day.

Cast: Eduardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

Director: Alejandro Gomez Monteverde

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Emotional Dramas

Be Snappy

to

Be Responsive

Performance is Not Always a Given

NETFLIX

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Genres

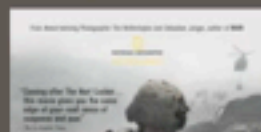
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Emotional Movies



Performance is Not Always a Given

NETFLIX

We had to perform magic to get our Webkit core to do this one transition - "accelerated compositing"

Suggestions for You

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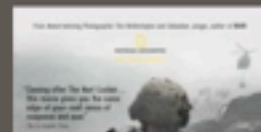


TV



✕ View more suggestions

Emotional Movies



Performance is Not Always a Given

NETFLIX

Suggestions for You

MORE

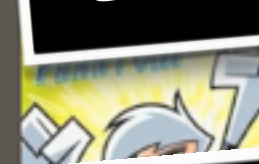
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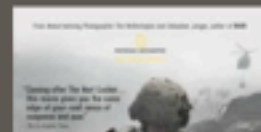


We had to perform magic to get our Webkit core to do this one transition - "accelerated compositing"

For Entry Price Point devices we have to turn off animation progressively

✕ View more suggestions

Emotional Movies



Advances in HTML5

Scrollability, New iOS Physics Project from Facebook for iPhone Creator, Joe Hewitt

By [Sarah Perez](#) / May 20, 2011 6:58 AM / [6 Comments](#)



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Recommend

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Hacker News



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This post is part of our ReadWriteMobile channel, which is dedicated to helping its community understand the strategic business and technical implications of developing mobile applications. This channel is sponsored by [Alcatel-Lucent](#). As you're exploring these resources, check out this helpful resource from our sponsors: [Cultivating a Developer Ecosystem: Understanding Their Needs](#)



Joe Hewitt, the creator of the Facebook iPhone app, Firebug, and former contributor to Mozilla's Firefox, [announced earlier this month](#) that he was leaving Facebook to go build "tools." What sorts of tools? Not just mobile tools, but "tools for writers, designers, programmers, whatever," he wrote on his personal [blog](#).

Since then, many developers have been eagerly anticipating the tools Hewitt will create. Today, we get to see what one of those is: [Scrollability](#), a script that brings native scrolling to mobile Web applications.

What's Scrollability?

According to [the project's website](#), Scrollability is a single script, that's small, and with no external dependencies. You "drop it into your page, add a few CSS classes to scrollable elements, and scroll away," the site explains.

Arnulfo Heriberto Hao

Elbert Murray Heartsill

Responsiveness Across platforms

	Input
Web	Pointer Indirect
Tablet/ Mobile	Fingers Direct
TV	Remote Indirect

Responsiveness Across platforms

	Input	Animation
Web	Pointer Indirect	Make Indirect Input Feel More Direct
Tablet/ Mobile	Fingers Direct	Make Direct Input Feel Real
TV	Remote Indirect	Make Indirect Input Feel More Direct Reinforce the Cinematic

Responsiveness Across platforms

	Input	Animation	Invitations
Web	Pointer Indirect	Make Indirect Input Feel More Direct	On hover
Tablet/ Mobile	Fingers Direct	Make Direct Input Feel Real	At touch/hold endpoints
TV	Remote Indirect	Make Indirect Input Feel More Direct Reinforce the Cinematic	Static hints (usually once an item is selected)

Responsiveness Across platforms

	Input	Animation	Invitations	Performance
Web	Pointer Indirect	Make Indirect Input Feel More Direct	On hover	Less of a consideration
Tablet/ Mobile	Fingers Direct	Make Direct Input Feel Real	At touch/hold endpoints	Can be a consideration
TV	Remote Indirect	Make Indirect Input Feel More Direct Reinforce the Cinematic	Static hints (usually once an item is selected)	Definitely an issue on some low-end devices

TV Experiences...

TV Experiences...

NETFLIX

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Bella

2006 PG-13 1h 31m



Two lost souls – Nina, a pregnant, unmarried waitress, and Jose, an introspective cook with a tragic past – find solace in each other as their lives become unpredictably linked throughout the course of one incredible day.

Cast: Eduardo Verástegui, Tammy Blanchard...

Categories: Drama, Indie Dramas

Director: Alejandro Gomez Monteverde

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Emotional Dramas

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Movies, TV shows, actors, directors, genres 🔍

Genres ▾

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Danny Phantom: Ssn 2: Reality Tr ...



Play Next

Heroes: Ssn 1: Homecoming



Resume

2m 43m

Alice in Wonderland



Resume

0m 108m

Bill, rate what you've seen to reveal suggestions just for you

Rate *Heroes:*
Season 1

Haven't Seen It

Suggestion

1

Suggestion

2

Suggestion

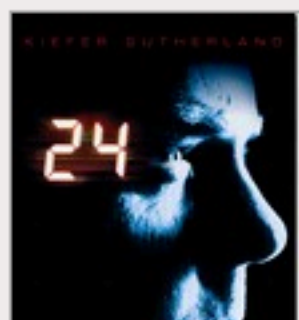
3

Suspenseful Conspiracy Action & Adventure

[See all >](#)Your taste preferences
created this row.Suspenseful
Action & Adventure

As well as your interest in...

24: Season 2



Chain Reaction



Westbound



Boxer's Adventure



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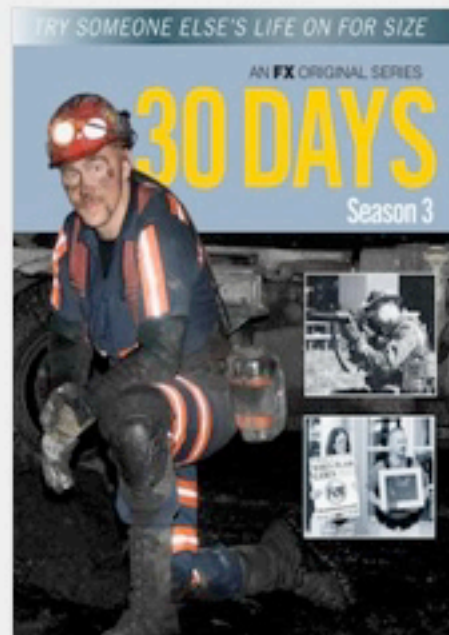
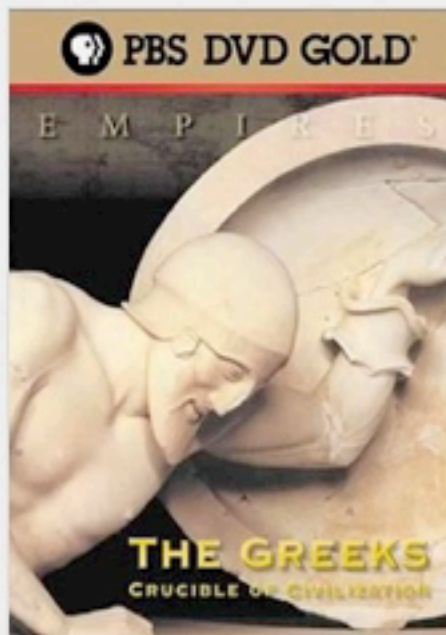
Genres ▼

New Arrivals

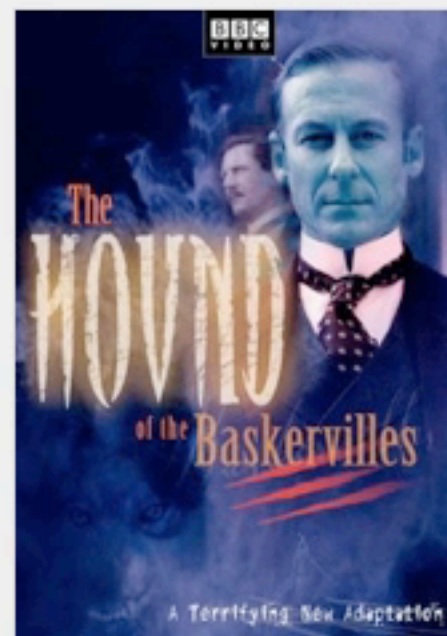
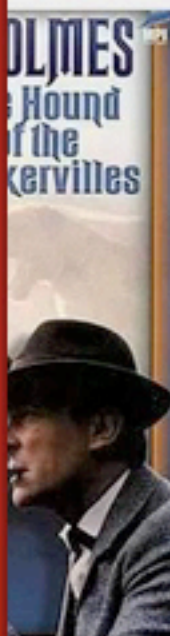
Starz Play

Instantly to your TV

TOP 10 FOR BILL



BRITISH CRIME THRILLERS



CRITICALLY-ACCLAIMED DARK ACTION & ADVENTURE

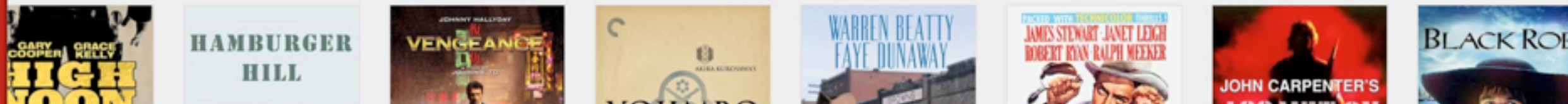
TOP 10 FOR BILL



BRITISH CRIME THRILLERS



CRITICALLY-ACCLAIMED DARK ACTION & ADVENTURE



Can Influence Website Experience



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billwscott.com/share/presentations/2011/aol

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<http://looksgoodworkswell.com>

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