

Users are always **RIGHT!**

Usability and Eyetracking
to improve web sites



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GoodWebDesign!=art

GoodWebDesign==usability

Usability is what
really matters.

The most important thing
about the web is that
it is intended to be **used**.

Star Tribune

NEWSPAPER OF THE TWIN CITIES



TIME

Detroit Free Press

www.freep.com

YAHOO! NEWS

LAS VEGAS  **SUN**

DallasNews.

The Dallas Morning News

Google

The Washington Post

MEGA

SE VIVE

The Mercury News

**USA
TODAY**

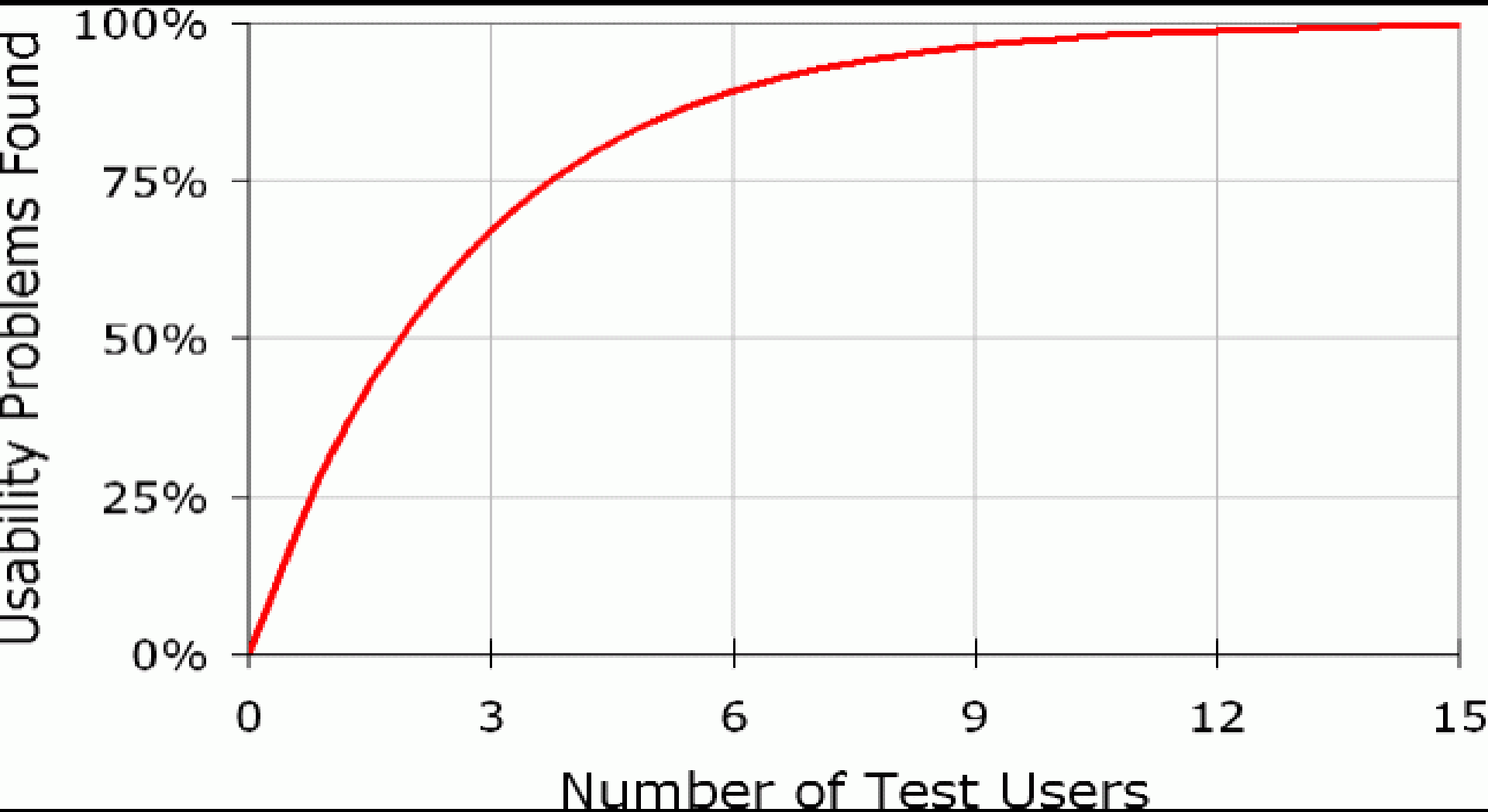
The New York Times



**MINNESOTA
PUBLIC RADIO®**

Usability testing

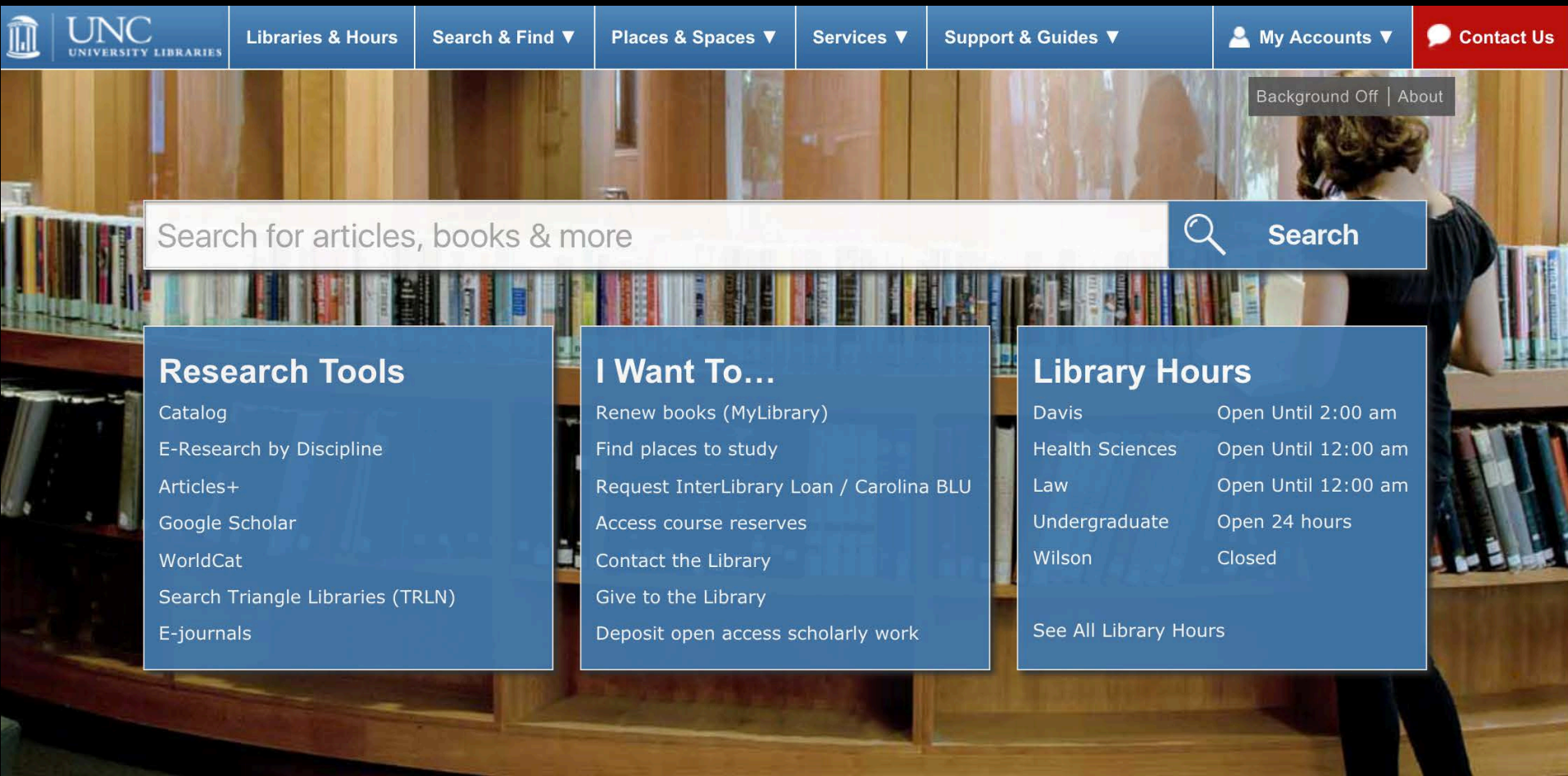
You can find 80 percent of the problems with 5 interviews.



Usability testing

■ *Step one: Design your study*

- Obviously you cannot analyze your entire site, nor can you study all the actions that all types of users might perform.



Usability testing

■ *Step one: Design your study*

- Decide on a category of users, define some tasks that they would do frequently, and choose four to five benchmark tasks to evaluate.



Usability testing



■ *Step one: Design your study*

- Carefully select tasks to simulate what actual users of the site would do.

Usability testing

■ *Step one: Design your study*

- Once you have your tasks, design the experiment. Consider questions such as:
 - What types of demographic information relevant?
 - What quantitative questions do you want to ask?
 - What types of qualitative questions do you want to ask?
 - When will you want users to “think aloud?”
 - When do you want them explore silently?
 - Will you record?
 - Will you use a screen capture program?

Usability testing

■ *Step two:* *Create and finalize testing instrument:*

- Script
- Informed consent
- Pre-experiment questionnaire
- Free observation checklist
- Tasks
- Post experiment questionnaire
- Post experiment interview questions
- Files for reference [here](#).

Usability testing

- *Step three: Gather data*

- Carefully observe each session and take notes about the participants' interactions with the site.





Usability testing

- *Step three: Gather data*
 - You should recruit at least five test subjects, but even three can provide some insight.

Usability testing

■ *Step three: Gather data*

- Participants will need to read and sign an informed consent.





Usability testing

- *Step three: Gather data*
 - A good outline to follow:
 - Welcome, demographic/pre-survey questions (5 min.)

Usability testing

■ *Step three: Gather data*

- A good outline to follow:
 - Free observation time (5-10 min.)



Usability testing

■ *Step three: Gather data*

- A good outline to follow:
 - Assigned tasks with and/or without “think aloud” protocol (5-10 min.)



Usability testing

■ *Step three: Gather data*

Ask yourself....

- Which tasks were performed successfully?
- How long did they take?
- Did participants make errors?
- What problems occurred?
- Did the participants have a conceptual model of the site?
- Was it correct?

Usability testing

■ *Step three: Post-task questionnaire*

- One of your post-test questionnaires should gather subjective data, and should contain quantifiable inquiries.





Usability testing

- *Step three: Gather data*
- **Post test discussion (5-10 min.)**
- Take some time to talk with participants about the site in a more relaxed way. plan a few open-format These should elicit more overall, qualitative impressions of the site or app.

Usability testing

■ *Remember to be prepared*

- Clearly, you should interact with the site yourself ahead of time to become familiar with its functionality, including functionality outside of what your tasks include. Understand recording tools you will use (Screencast-o-matic or Quicktime). Checklist of supplies needed,



Usability testing



Step four: Analyze your data and make conclusions

- Inspect your data and determine what you've learned. Compare survey data with task successes or failures. What does the post-test survey tell you?

Usability testing

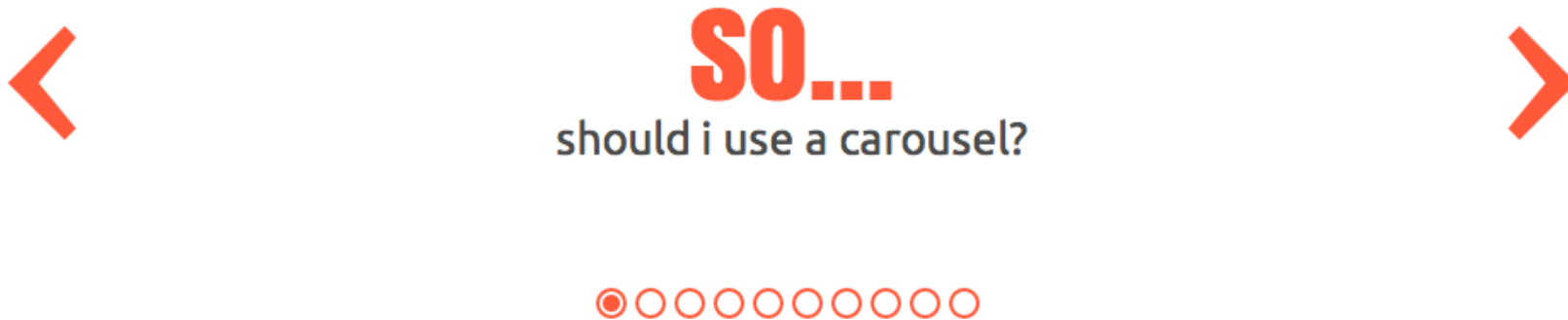


Step four: Analyze your data and make conclusions

- Look at descriptive statistics primarily; if you are able to, you should also look at appropriate inferential statistics (e.g., t-test).

Usability testing

- *Step four: Analyze your data and apply other research findings.*



<http://shouldiuseacarousel.com/>

Use sliders or carousels?

- Only 1% of the people actually click on a slide, which almost always was the first slide;
- People simply ignore your slider, because it triggers banner blindness;
- They slow down your site, negatively impacting your SEO and conversion rate(!!);
- They don't always work well on mobile devices,
- They push your content down, which Google recently mentioned yet again is not smart;
- It dilutes your message, because suddenly there are multiple messages on your homepage.

But...

- Ask the right questions: What value will a slider will add to your site? If you want a slider, you're now in a position to make it work better for you.
- Don't rely on your slider to produce conversions on their own.
- The fact that nearly every client finds sliders attractive suggests that people visiting your site also find sliders attractive.
- There is no simple yes/no answer to the question "Should I have a slider on my site?"

<http://makeyourselfvisible.com/internet-marketing/should-i-use-website-slider/>

design, usability
and eyetracking

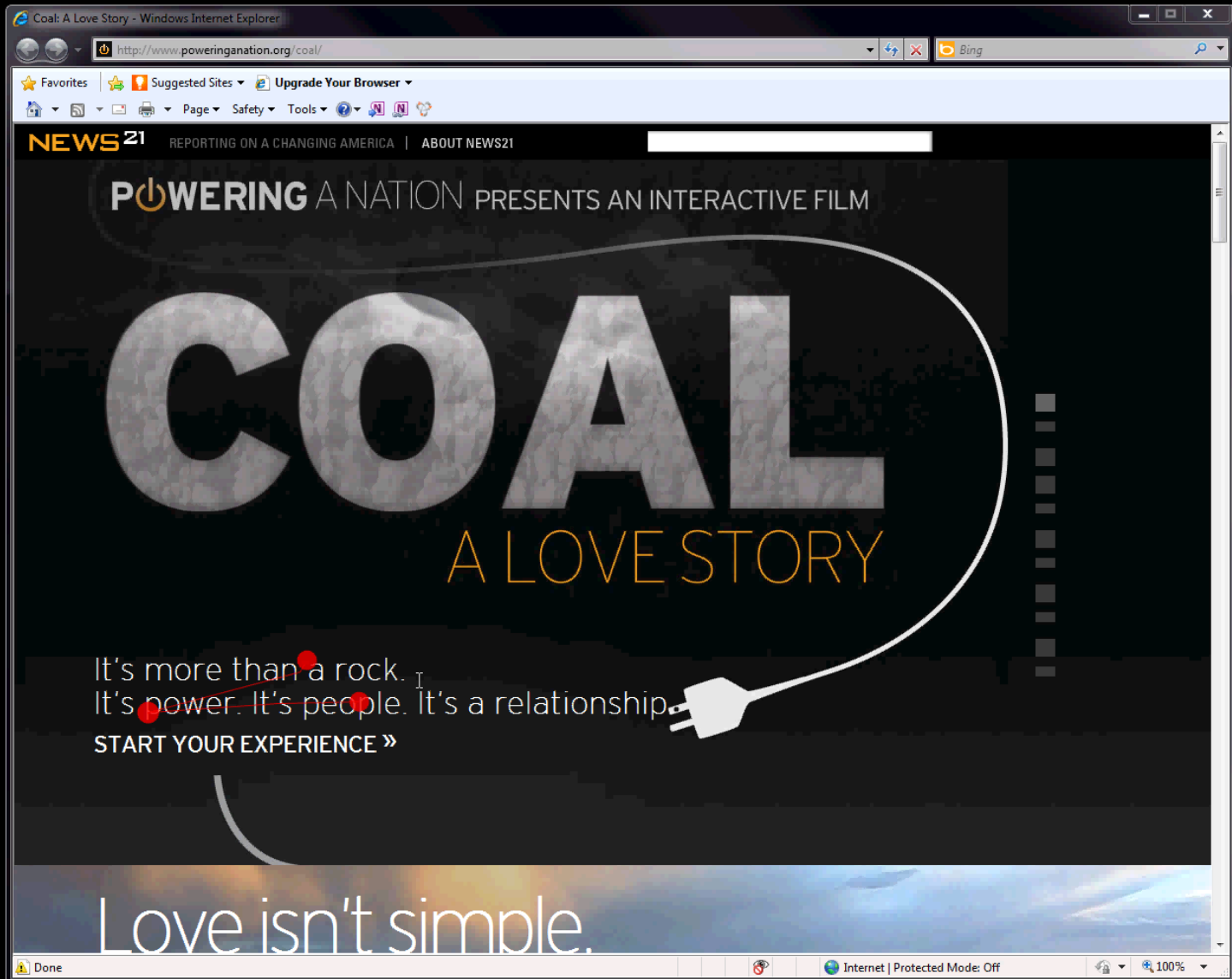
What is eyetracking?



Eyetracking equipment



Eyegaze video



Gaze plots



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[Life](#)
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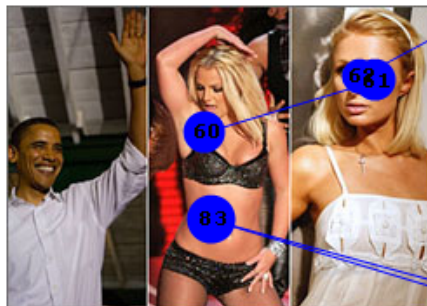
2008 election coverage

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[■ Video](#)
[■ Electoral Vote Tracker](#)
[■ Complete coverage](#)

Ad compares Obama with pears, Hilton

Updated 4h 53m ago | Comment | Recommend

E-mail | Save | Print | **RSS**



Obama by Dilip Vishwanat/Getty Images; Spears by Mark Terrill, AP; Hilton by Dan Steinberg, AP

By Chuck Raasch 74 ~~Journal~~ News Service

WASHINGTON — In April, John McCain said Americans want "75" respectful" 76 nial campaign, but lately he's shown all but respect for Barack Obama.

On Wednesday, pro-78 nective Republican
mber McCain all new ads 79 comparing
77 Democratic rival Obama to troubled
80 celebrities Paris Hilton and Britney Spears
and asserting that celebrity is not presidential leadership.

It's the latest salvo in a negative onslaught in which McCain has blamed Obama for high gas prices, said Obama would rather lose the war in Iraq than lose an election and made objectively discounted claims that Obama declined a visit wounded troops in Germany because it would have no political benefit.

Related Advertising Links

What's This?

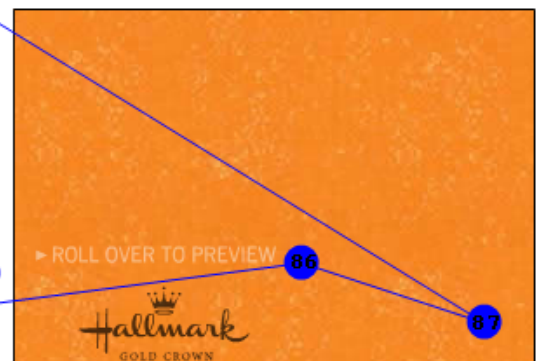
Hot Stock Alert - AESO

Solar ,Wind, CoGen AESO an emerging force
atlanticenergy.net

"Teeth Whiteners Exposed"

7 Teeth Whitening Products Tested, Rated, and...
www.Best-Teeth-Whitening.com

Advertisement



Hot spots or heatmaps



100

50

0

Why do this?

Usability & design working together

TASK: Find the calendar of things to do.

MAY 7, 2008

LAS VEGAS SUN

NEWS ARE OPINION SPORTS MULTIMEDIA GUIDES BLOGS TOPICS POLITICS

calendar Search

Search Results: "calendar"

Search again:

Optional advanced criteria

Date range from to example: 2008-05-07

☐ Photo galleries ☐ Blog entries ☐ Stories ☐ Users ☐ Videos

1616 results found. Showing 1-40.

SORT BY: RELEVANCE DATE [NEXT PAGE](#)

STORY

Mormons exposed. Mormons opposed

Saturday, October 13, 2007

...g and lounging in fall-gloom, \$14.99 **calendars**; Mr. December, Mr. March, Mr. Puffe ...g and lounging in full-gloom, \$14.99 **calendars**; Mr. December, Mr. March, Mr. Puffe ... oary.Mormons Exposed is a stud-lust **calendar**. Twelve controversial months of scul ... ons as too straitlaced, according to **calendar** creator Chad Hardy of Las Vegas . To ...

STORY

The Movie Guys -- Jeff Howard and Dave Neil: Fall for flicks as autumn approaches

Friday, September 3, 1999

... r rosaries if you've got them.On the **Calendar**: Sept. 10.On the Marquee: "Amer ... y ("The Blue Room").On the **Calendar**: Sept. 15.On the Marquee: "For ... rge Steinbreinner of Hollywood?On the **Calendar**: Sept. 17.On the Marquee: "Mumf ... ot; "Grand Canyon").On the **Calendar**: Sept. 24.On the Marquee: "Thre ...

STORY

Live in the Present

Friday, November 26, 2004

... er dark and the 2005 Nuns Having Fun **Calendar** (No. 177). At my school, that last i ... ith pen.7. Touchstone Pictures' "**Calendar Girls**" sunflower plant kit.8. T ... ut; (2)38. Siegfried & Roy 2004

MOST READ **DISCUSSED** **EDITORS' PICKS**

1. Tropicana Entertainment makes money but still files for bankruptcy
2. New generation of titans emerging in Las Vegas
3. Teamsters may undercut members
4. Attorney: Dawn got Jim where he is today
5. Pedestrian death slows I-15
6. Nurses unions' showdown starts today
7. The upside of anger: Neighbors meeting neighbors
8. Given \$50,000, he decides to run
9. Planned coal plant gives up its water source
10. MGM Mirage blames profit dips on Monte Carlo fire

[COMPLETE LISTING](#)

CALENDAR



Why do this?

Usability & design working together

The calendar today. Eyetracking and usability testing helped!

LAS VEGAS WEEKLY



Caesars' Bacchanal Buffet celebrates three years with enticing new dishes

Whimsical desserts, snack flights and more.

With Sam Nazarian out at SLS, the Strip loses a colorful character

New bar the Vault is coming to Fremont Street

CALENDAR

14
WED

15
THU

16
FRI

17
SAT

18
SUN

Industry Wednesdays

Chateau Nightclub & Gardens



Pub Quiz

Shakespeare's Grille & Pub | time TBA



Lunch and Learn Educational Series

Cleveland Clinic Lou Ruvo Center for Brain Health

ALL EVENTS ON WEDNESDAY »

Editing and eyetracking

Source	<i>New York</i> magazine site: www.nymag.com
What was done	reformatting editing, tightening
Total hours of work	Less than 2 hours UI designer and Developer spent less than two hours combined

Editing and eyetracking

Task:
Read/ learn

www.nymag.com

Simple
Content

Feature

Will Wait for Food

Judging by the long, snaking lines you encounter outside burger shacks and burrito huts these days, an alien visitor to our city might think that there was a pre-perestroika, Soviet-style food-rationing program going on. How long are you willing to wait for a hunk of cheese, a spicy tuna roll, or an adorable cupcake? Find out below, and whether it's worth it.

By Ben Patena

Tomoe Sushi

(172 Thompson St.) otherwise known as the place with the line. Tiny, unassuming, and relatively cheap.

The Time
Saturday: 3:10 p.m.

The Wait

An orderly but exasperating 1 hour, 21 minutes, and 34 seconds. At the 50-minute mark, you may experience joint pain and hallucinations, and consider retreating to the Chinese toast-and-bachi pub shop at the street.

Alternatives

Ushi Wakamaru (136 W. Houston St.) or hire someone to wait in line for you.

Worth it?

As an endurance-training exercise, Tomoe can't be beat—all subsequent food lines are a breeze. But foodwise, not even Massimo would be worth a wait this long.



Sarabeth's

(423 Amsterdam Ave.) the legendary quaint house of pancakes on the brunch happy Upper West Side.

The Time

Sunday: 12:50 p.m.

The Wait

A miserable 55 minutes and 13 seconds spent shuffling around the sidewalk with a gaggle of tourists who block pedestrian traffic and peevish, fed-up locals who look like they suspect the hostess of taking bribes.

Alternatives

Danmy Greenhouse (541 Amsterdam Ave.) The wait is a lot shorter, the steppin' and eggs, chipped liver, and matcha tea are superb, and the loquacious waiters take orders by shouting "Okay, guest, go!"

Worth it?

For faggots with unique blindfolds and sliced bananas? We think not.

Shake Shack

(at Madison Square Park) Danny Meyer's fast-food phenomenon.

The Time

Friday: 1:34 p.m.

The Wait

A toasty 17 minutes and 8 seconds, including separate lines to order (great, delicious) and pick-up (hot, sweet) food. There's a secret line for custard and donuts only. And if you order everything at once, you can cut the line later to retrieve dessert as well as dirty looks from all sides.

Alternatives

A New York Burger Co. burger (303 Park Ave. S.) and a McDonald's McFlurry (22 E. 23rd St.)

Worth it?

An emphatic yes for the best burger in town, extra-creamy custard, and half-bottles of highly drinkable wines.



(Photo credit: Carrie Kahn)

Burger Joint

(214 Le Parker Meridien, 119 W. 56th St.) behind the curtain of the lobby.

The Time

Monday: 1:20 p.m.

The Wait

A clamorous 26 minutes and 42 seconds, with loud classic rock and an overworked, understaffed fry station contributing to the chaos and our temperarily misplacing our ticket.

Alternatives

Primeburger (5 E. 51st St.) for petite, old-fashioned burgers and pie.

Worth it?

Sure, but better to come back in an hour and probably cut your wait in half.



Magnolia Bakery

(401 Bleecker St.) the only cupcake café with a bounce.

The Time

Saturday: 10:40 p.m.

The Wait

"How long can it take to buy a cupcake?" beamed the optimistic NYU student at the end of a line that piled up around the corner—25 minutes and 3 seconds, that's how long, my friend.

Alternatives

For a similarly frothy atmosphere, Bibb's Bakery (184 Ninth Ave.) for better cupcakes, Yeastcraft Blue Smoke, and brand-new vegan bakery Babycakes.

Worth it?

Not if it were the last cupcake on Earth.



(Photo credit: Jim Bostardo)

DiPaoli's

(200 Grand St.) cheese and gourmet Italian foods.

The Time

Saturday: 4:03 p.m.

The Wait

You'll be squeezed in like sardines for 18 minutes and 47 seconds, with shoppers who seem to be ordering a Soprano's short "2 lbs. Parm, 6 balls mozz, 1 lb. prosciutto, 1 lb. mortadella, a tub of ricotta," read one customer's shopping list.

Alternatives

Alleva Dairy (188 Grand St.) for fresh mozzarella and ricotta.

Worth it?

Yes, the Parmigiano-Reggiano is top-notch, the ricotta divine, and the friendly staff endlessly patient—maybe too patient.



Chipotle

(150 E. 52nd St.) the McDonald's-owned burrito-burn chain.

The Time

Tuesday: 1:15 p.m.

The Wait

Despite the daunting sight of a chipy throng of desk jockeys snaking through every aisle of the restaurant, the line moves quickly, thanks to the fastest burrito wranglers in town. Total waiting time: 10 minutes and 21 seconds.

Alternatives

You can fax in your Chipotle order (212-755-8758) and stand in a much snooder pickup line.

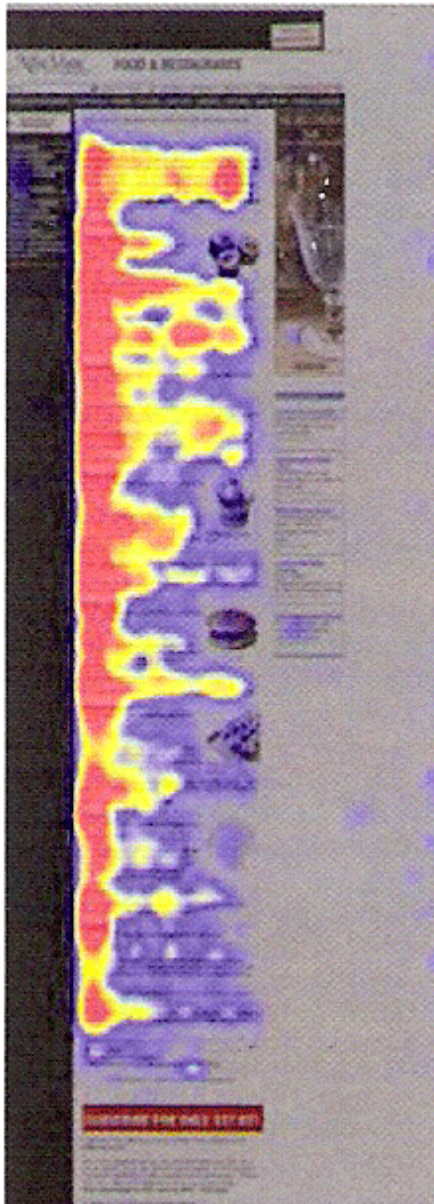
Worth it?

Yes, the beef and pork burritos are fresh and tasty, despite a weirdly textured tortilla. Still, nearby Pappano Tapas's tacos are better, but the wait there is unpredictable.

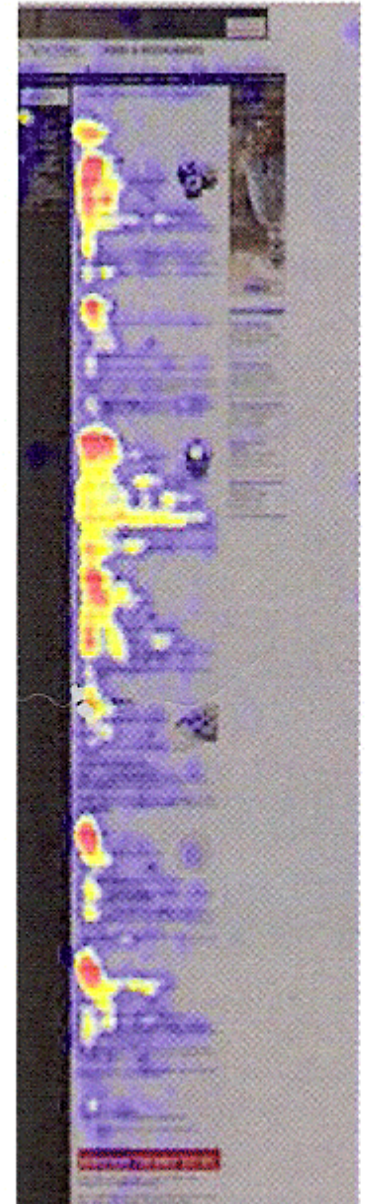
Clint Eastwood as **Red**? The killing of Henry Jones is such a badass move that it's hard to imagine anyone else pulling it off. Eastwood's Red is a man who has seen too much and is now a man of few words. He is a man who has been through a lot and is now a man who has learned to live with what he has. He is a man who has been through a lot and is now a man who has learned to live with what he has.

Editing and eyetracking

Simple
Content



Simple
Content
Reformatted



Editing and eyetracking

Simple Content: Original and Edited

	Original	Edited	Effect
Reading level	9 th Grade	8 th Grade	
Good Web layout	Narrow column, headings	Narrow column, headings, bullets, good writing, main idea concise, graphics support point	
Content Comprehension	52%	86%	34%
Time	2:22	1:29	0:53
User Satisfaction	4.68	4.93	4%

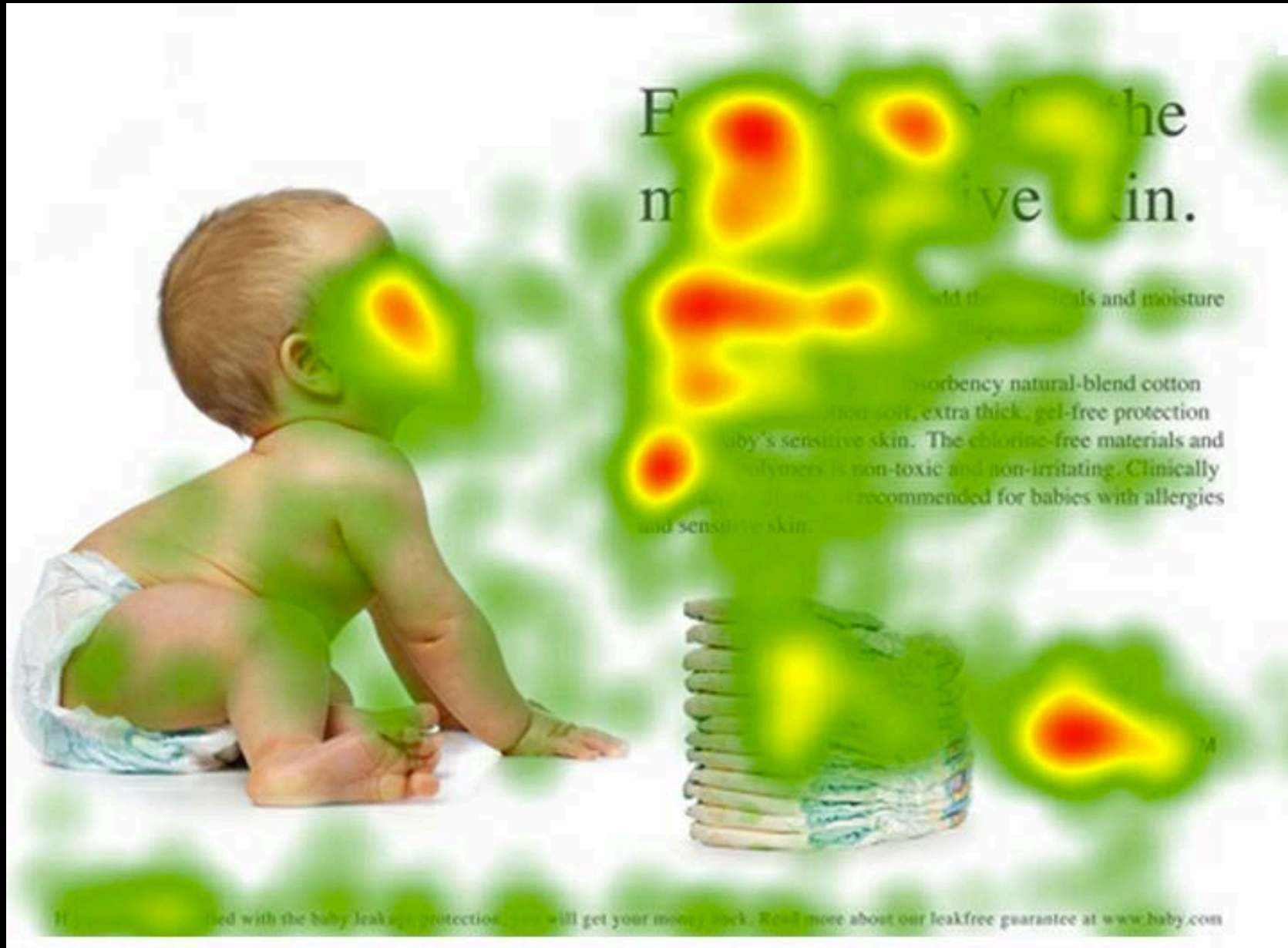
Choosing photos and eyetracking

- Online images get fixations if they:
 - Relate to surrounding content
 - Are clear
 - Feature faces
 - Feature “real people”
 - Models denote ads, and are avoided

Choosing photos and eyetracking



Choosing photos and eyetracking



Choosing photos and eyetracking



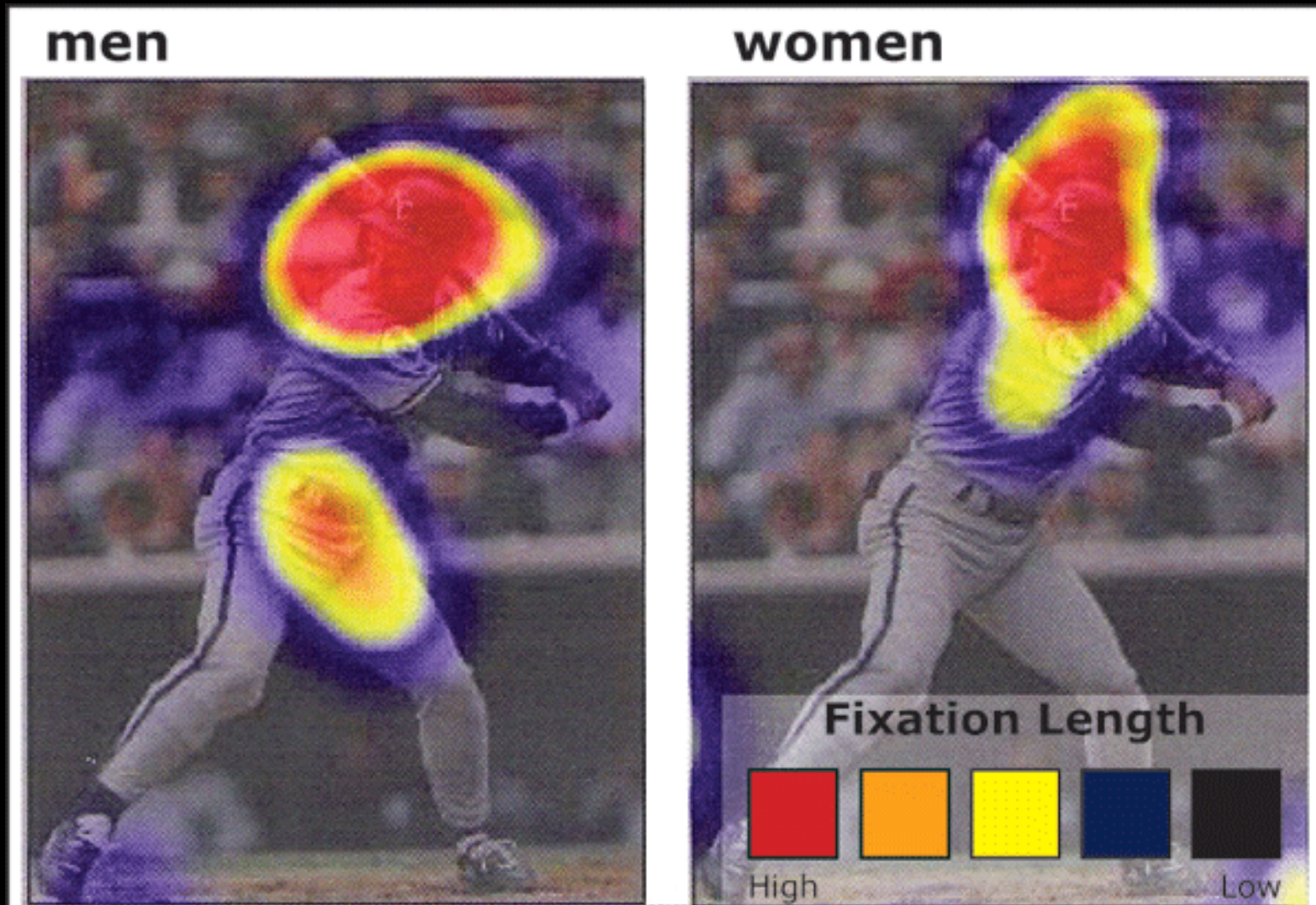
Choosing photos and eyetracking

Finding trends. What do they tell us?



Choosing photos and eyetracking

Finding trends. What do they tell us?



Thank you!

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