’Sup.

“

My goal is simple. It is a complete understanding of the universe.

STEPHEN W. HAWKING

Device Experiences

Asset Loading

UA Detection

Retina

User Context

Adaptive vs. Responsive Web Design

CSS3

Mobile First

Feature Phones

Phablets

Progressive Enhancement

Feature Detection

Tablets

HTML5

Frameworks

UA Sniffing

#poopin

Calm the 'eff down.

flickr.com/photos/esoterica/2210108334

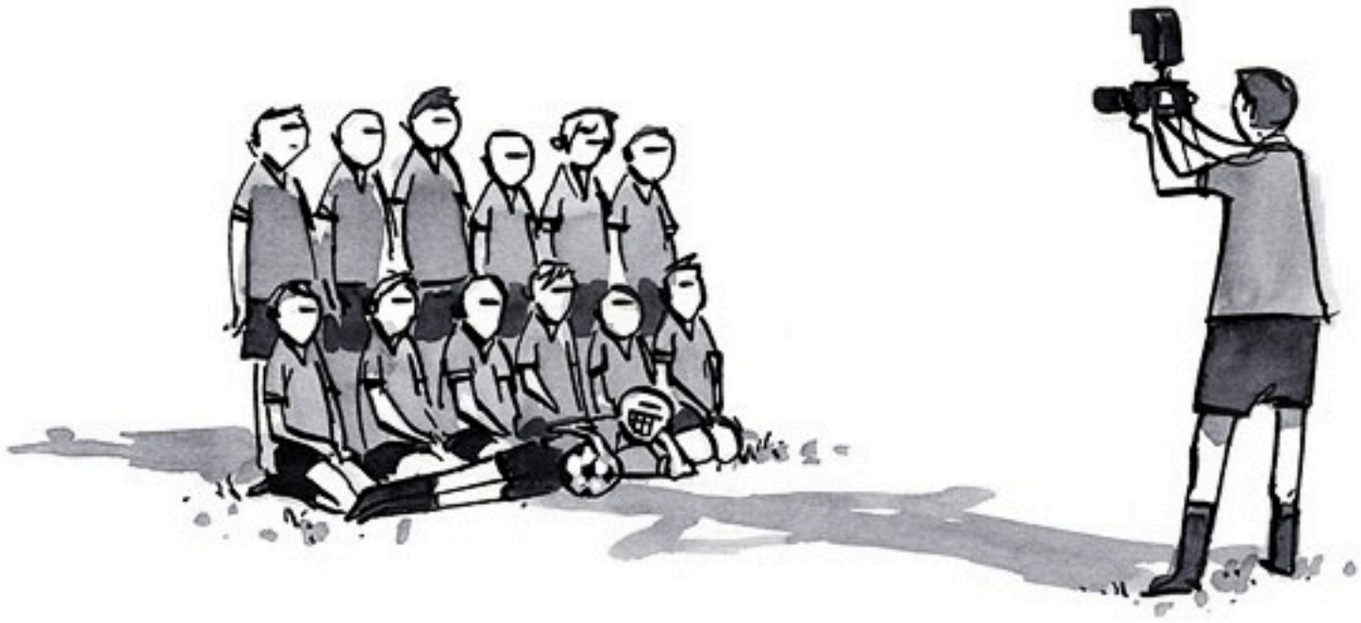
MAY 25, 2010

Responsive Web Design

by ETHAN MARCOTTE

Published in: CSS, Layout, User Interface Design, Mobile, Mobile Design, Mobile Development

Discuss this article » | Share this article »



> *The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should* [illegible] *flexibility. But first, we must "accept the ebb and flow of things."*
>
> *John Allsopp, "A Dao of Web Design"*

The English architect Christopher Wren once quipped that his chosen field "aims for Eternity," and there's something appealing about that formula: Unlike the web, which often feels like aiming for next week, architecture is a discipline very much defined by its permanence. A building's foundation defines its footprint, which defines its frame, which shapes the facade. Each phase of the architectural process is more immutable, more unchanging than the last. Creative decisions quite literally shape a physical space, defining the way in which people move through its confines for decades or even centuries.

alistapart.com/articles/responsive-web-design

Search ALA

GO

include discussions

Topics

- Code
- Content
- Culture
- Design
- Mobile
- Process
- User Science

Snapshot

Learn how to use fluid grids, flexible images, and media queries to create elegant user experiences with responsive web design.

Online Project Management with interactive Gantt. Nothing to install. Try it Free!

Ad via The Deck

JOB BOARD

Svpply is looking for a Senior Developer.

A Flexible Grid

“

Pfft. Nobody sits around resizing their browser window.

THE INTERNET, MISSING THE POINT

768 px
320 px
480 px
1024 px

Photoshop File Edit Image Layer Select Filter Analysis 3D View Window Help (19%) Sat Mar 10 18:02

ESSENTIALS DESIGN PAINTING CS Live

Feather: 0 px Anti-alias Style: Normal Width: Height: Refine Edge...

COLOR SWATCHES STYLES

R 150
G 128
B 129

ADJUSTMENTS MASKS

Add an adjustment

No document open

New

Name: Canvas

Preset: Web

Size: 1024 x 768

Width: 1024 pixels

Height: 768 pixels

Resolution: 72 pixels/inch

Color Mode: RGB Color 8 bit

Background Contents: White

Advanced

OK

Cancel

Save Preset...

Delete Preset...

Device Central...

Image Size:
2.25M

LAYERS CHANNELS PATHS

Normal Opacity:

Lock: Fill:

The grid is not a tool to impose order on users or to usurp their control; it is a tool to impart order to our users, so that they can create their own experiences.

KHOI VINH

Ordering Disorder: Grid Principles for Web Design

target ÷ context

960 px

633 px

306 px

53° Clear and punny
WEATHER | COMMUTE

The Boston Globe

Search

NEWS METRO BUSINESS SPORTS ARTS FEATURES OPINION MAGAZINE CLASSIFIEDS TODAY'S PAPER

N.Y. police chief denies student was left to die

US asks that rule on gays remains in place

D.O.J. seeks to continue "don't ask, don't tell" policy.

Supporting headline goes here

30 comments | Discussion

One-time terror suspect longs for normalcy

Cleared of wrongdoing in Times Sq. bombing case, Kahn is trying to rebuild his life.

960 px

633 px

306 px

633 ÷ 960 = .659375

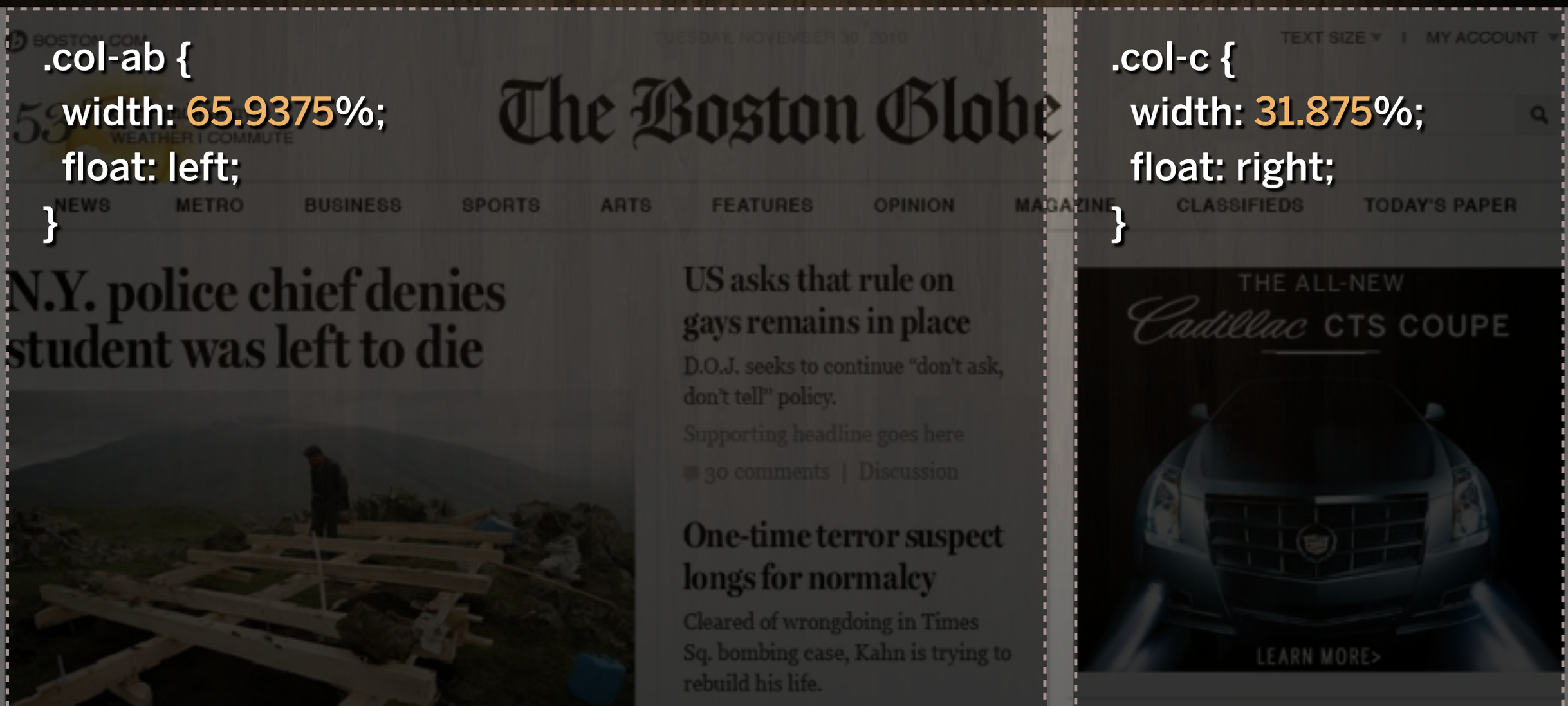
65.9375%

306 ÷ 960 = .31875

31.875%

```
.col-ab {
  width: 65.9375%;
  float: left;
}
```

```
.col-c {
  width: 31.875%;
  float: right;
}
```



.col-ab

.col-c

BOSTON.COM

TUESDAY, NOVEMBER 30, 2010

TEXT SIZE | MY ACCOUNT

53° Clear and punny
WEATHER | COMMUTE

The Boston Globe

Search

NEWS METRO BUSINESS SPORTS ARTS FEATURES OPINION MAGAZINE CLASSIFIEDS TODAY'S PAPER

.col-ab

N.Y. police chief denies student was left to die

.col-c

U.S. appeal that rule on gays remains in place

D.O.J. seeks to continue "don't ask, don't tell" policy.

Supporting headline goes here

30 comments | Discussion

One-time terror suspect longs for normalcy

Cleared of wrongdoing in Times Sq. bombing case, Kahn is trying to rebuild his life.

Media Queries

Get your own damn breakpoints.

The Boston Globe

BRIAN FEULNER FOR THE BOSTON GLOBE

Apple has become a retailing star

The Globe was given a rare inside look into how the Apple Store works, and how some of its 36,000 employees spread across 363 sto change shopping.

- Photos: A look inside the Apple Store

Friends, students gat minister's treasures

and furniture collection ctioned, in an event that eet ice.

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Fenway"

For homeless families, hotel is a life in limbo

With shelters overflowing, the state uses hotels to meet the needs of a surge of Mass. families who have become homeless in the past few years.

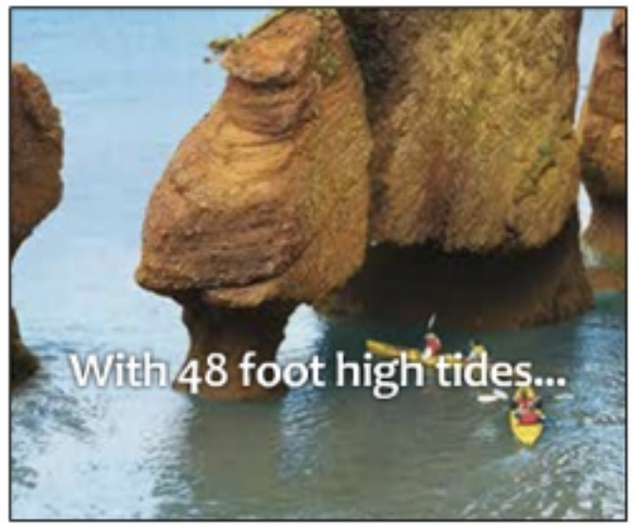
Afghans: US paid $50,000 per shooting spree death

The US paid $50,000 for each Afghan killed and $11,000 for each person wounded in the shooting spree allegedly committed by a US soldier, two Afghans said.

Mass. felons' DNA test tabase has gaps

te offic
nples o
le in th

A day after winning Louisiana's primary, Rick Santorum said the results show he is a strong contender for the GOP nomination



"

"No state can be a health care island."

rofessor

Globe Insiders offer: Classic Italy

Be formless. Be shapeless—like water. If you put water into a cup, it becomes the cup. You put it in a teapot, it becomes the teapot.

BRUCE LEE

Also Josh Clark (@globalmoxie)

```
/* Styles for everybody, including those without media queries. */


@media screen and ( min-width: 340px ) {
    /* 340px and up. */
}

@media screen and ( min-width: 720px ) {
    /* 720px and up. */
}

@media screen and ( min-width: 1080px ) {
    /* 1080px and up. */
}
```

```
@media screen and ( min-width: 720px ) {

    .col-ab {
        width: 65.9375%;
        float: left;
    }
    .col-c {
        width: 31.875%;
        float: right;
    }

}
```

Cloud Four Blog

TECHNICAL NOTES, WAR STORIES AND ANECDOTES

The EMs have it: Proportional Media Queries FTW!

Posted: March 28, 2012 | **Author:** Lyza Gardner | **Filed under:** Cloud Four Stories, Emerging Technology | **Tags:** fluid layouts, media queries, mobile web design, responsive web design | 25 Comments »

If we're going to be proportional...

A core tenet of Responsive Web Design (RWD) is fluidity and proportion. Instead of using fixed-width layouts, we enlightened web devs and designers use percentages in our CSS. Font units aren't pixels or points anymore, they're percentages (typically for top-level baseline reset) or, more often, ems. And yet the vast majority of us still write width-based media queries in pixels, e.g.:

```
@media all and (min-width: 500px) {}

@media screen and (max-width: 800px) {}
```

It's a natural thought process: for windows or screens of particular width ranges, we want to flow our content in a particular way. This naturally seems like a pixel dimension. But, once again, to bring out my big hammer, what about when we look at things from a content perspective?

Folks who design for traditional reading media—where the content really is king—don't center design decisions around the absolute width of content-holding elements so much as around the optimal *line lengths* for the content they're flowing. There are some tried-and-true numbers one can shoot for that make for the "right" number of letters (and thus words) per line for comfortable human reading

Search for:

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Recent Posts

The EMs have it: Proportional Media Queries FTW!

Taking "Content First" Very Seriously

The Best Mobile Web Conferences are Coming Soon

First thing you should do to optimize your

How Apple.com will serve retina images to new iPads

Recent Comments

shawn on The EMs have it: Proportional Media Queries FTW!

Matt Haenlin on The EMs have it: Proportional Media Queries FTW!

Chris Hilditch on The EMs have it: Proportional Media Queries FTW!

blog.cloudfour.com/the-ems-have-it-proportional-media-queries-ftw/

zoom x 1

```
@media screen and ( min-width: 340px ) {
    /* 340px and up. */
}

@media screen and ( min-width: 720px ) {
    /* 720px and up. */
}

@media screen and ( min-width: 1080px ) {
    /* 1080px and up. */
}
```

zoom x 2

```
@media screen and ( min-width: 340px ) {
    /* 340px and up. */
}

@media screen and ( min-width: 720px ) {
    /* 720px and up. */
}

@media screen and ( min-width: 1080px ) {
    /* 1080px and up. */
}
```

zoom x 1

```
@media screen and ( min-width: 20em ) {
    /* 340px and up. */
}

@media screen and ( min-width: 45em ) {
    /* 720px and up. */
}

@media screen and ( min-width: 64em ) {
    /* 1080px and up. */
}
```

zoom x 2

```
@media screen and ( min-width: 20em ) {
    /* ~385px and up. */
}

@media screen and ( min-width: 45em ) {
    /* ~816px and up. */
}

@media screen and ( min-width: 64em ) {
    /* ~1224px and up. */
}
```

Flexible Images and Media

```
<img src="/img/cat.gif" height="100" width="200" />
```

```
img {
    max-width: 100%;
}
```

```
<img src="/img/cat.gif" />
```

img,
video,
canvas,
object {
    max-width: 100%;
}

```
<video>
    <source src="small.ogv">
    <source src="mo-bigger.ogv" media="min-width: 50em">
</video>
```

```
<img src="/img/cat.gif" />
```

github Search... Explore Gist Blog Help Wilto 609

scottjehl / Responsive-Images
forked from filamentgroup/Responsive-Images

Unwatch Your Fork 93 66

Code | Network | Pull Requests 0 | Stats & Graphs

An Experiment with Mobile-First Images that Scale Responsively & Responsibly — Read more
http://filamentgroup.com/examples/responsive-images/

Clone in Mac ZIP HTTP Git Read-Only https://github.com/scottjehl/Responsive-Images. Read-Only access

branch: master | Files | Commits | Branches 1 | Tags | Downloads

Latest commit to the master branch

removed the sample "extra" assets - just getting in the way of the demo.

scottjehl authored a year ago commit 0b7cb5903d

Responsive-Images /

name	age	message	history
rwd-images	a year ago	changed name of fictitious directory from "rwd-image-trap" to "rwd-ro… [scottjehl]	
sample-content	a year ago	removed the sample "extra" assets - just getting in the way of the demo. [scottjehl]	
.htaccess	a year ago	changed name of fictitious directory from "rwd-image-trap" to "rwd-ro… [scottjehl]	
README.md	a year ago	changed name of fictitious directory from "rwd-image-trap" to "rwd-ro… [scottjehl]	
demo.html	a year ago	removed the sample "extra" assets - just getting in the way of the demo. [scottjehl]	

github.com/scottjehl/Responsive-Images

README.md

Responsive Images

JANUARY 31, 2012

Responsive Images: How they Almost Worked and What We Need

by **MAT MARQUIS**

Published in: Layout, User Interface Design

Discuss this article » Share this article »

NOTE: Since this article ran in Issue No. 343, author Mat Marquis has established and is chairing a Responsive Images Community Group for the W3C. All are invited to participate. – Ed.

It's our job, as designers and developers, to pick apart even the seemingly most simple tasks to find [illegible]. When Ethan Marcotte coined "responsive web design," he outlined a responsive website is made up of three things: a flexible grid, flexible images and media, and media queries. In doing so, he opened up a world of new and exciting things to obsess over. I chose flexible images.

It's easy enough to style images so

alistapart.com/articles/responsive-images-how-they-almost-worked-and-what-we-need/

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GO

include discussions

Topics

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Snapshot

It's easy enough to style images so that they scale to fit within a parent container by adding `img { max-width: 100%; }` to one's stylesheet. To use this effectively, though, the image must be large [illegible] whatever size we can reasonably expect on the largest possible display. This can mean a great deal of overhead.

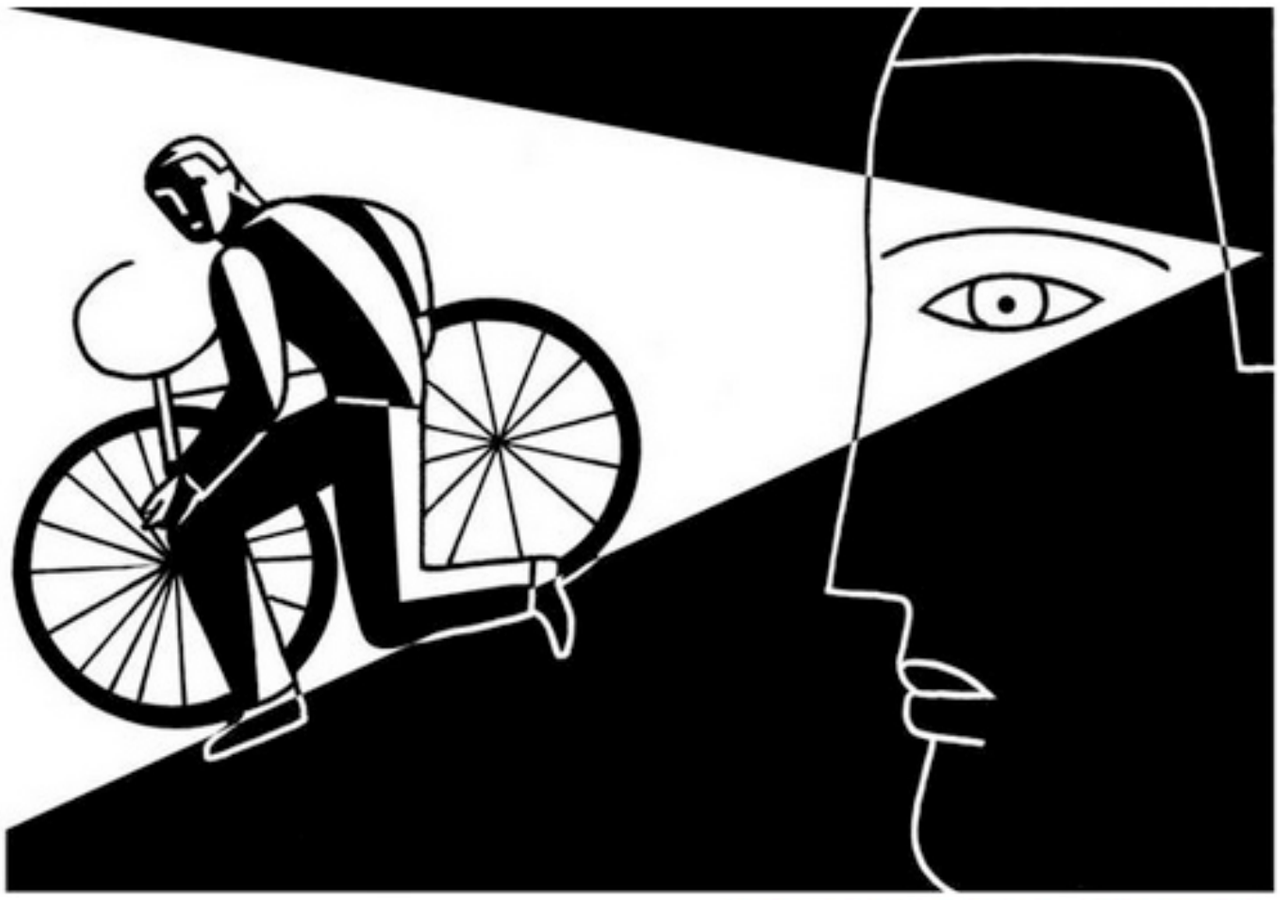
Ad via The Deck

JOB BOARD

Hangar 162 Productions is looking for a Java Developer.

57° Mostly sunny
WEATHER | TRAFFIC

The Boston Globe



ANTHONY RUSSO FOR THE BOSTON GLOBE

OPINION | FARAH STOCKMAN

Deadly certain

Science shows that our unconscious brains make snap judgments about strangers within seconds, based entirely on how they look.

- **3/30: Martin's death sparks soul-searching in Roxbury**
- **Adrian Walker: Stopped for being black**

Catherine Greig's sister asks court to release lien

The sister of "Whitey" Bulger's girlfriend is trying to protect her South Boston home from fines in connection to her sister's plea agreement.

Federal officials still seek to deport Obama's uncle

A week after resolving his drunken driving case, Onyango Obama must appear at a meeting next week with immigration officials. 2:05 pm

Large tornadoes, damage reported in Dallas area

The National Weather Service reported at least two separate "large and extremely dangerous" tornadoes south of Dallas and Fort Worth on Tuesday. 18 minutes ago

Patrick taps interim chief of state's National Guard

Major General L. Scott Rice will head the Guard after Joseph C. Carter was placed on leave following rape allegations. Carter has flatly denied the allegations. 24 minutes ago

- **3/30: Guard chief on leave amid rape allegations**

Campaign2012

WE PR

WE'LL GIVE YO

STARI
GROUNI

LEAR

Boston Globe eP

- **Check out the eP**
- **Download the ap**

Globe Insiders

```
<picture alt="Should accurately describe all sources.">
    <source src="mobile.jpg" />
    <source src="medium.jpg" media="min-width: 600px" />
    <source src="fullsize.jpg" media="min-width: 900px" />

    <img src="mobile.jpg" />
</picture>
```

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scottjehl / picturefill

Watch | Fork | Pull Request | 239 | 14

Code | Network | Pull Requests 1 | Issues 4 | Wiki 0 | Stats & Graphs

Don't use this :) — Read more

Clone in Mac | ZIP | SSH | HTTP | Git Read-Only | git@github.com:scottjehl/picturefill.git | Read+Write access

branch: master | Files | Commits | Branches 3 | Tags | Downloads

Latest commit to the **master** branch

This refactors the proposed markup (slightly) and picturefill JS to b...

scottjehl authored 9 days ago — commit 404c39d293

picturefill /

name	age	message	history
external	9 days ago	added images to local directory [scottjehl]	
README.md	9 days ago	This refactors the proposed markup (slightly) and picturefill JS to b... [scottjehl]	
index.html	9 days ago	This refactors the proposed markup (slightly) and picturefill JS to b... [scottjehl]	
picturefill.js	9 days ago	This refactors the proposed markup (slightly) and picturefill JS to b... [scottjehl]	

github.com/scottjehl/picturefill

README.md

Picturefill

Mailing List
Wiki
Chat
RSS
Contact Group

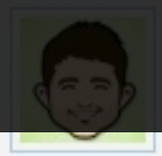
Responsive Images Community Group

Our goal is a markup-based means of delivering alternate image sources based on device capabilities, to prevent wasted bandwidth and optimize display for both screen and print.

News

Add new post →

Polyfilling picture without the overhead



Scott Jehl
Posted on March 15, 2012

FILAMENT GROUP, INC

In an early post, I offered up a sample picture element implementation in JavaScript (a polyfill) that we could use to play with and plan how the element should behave when/if implemented. The script did "work" in that it used the proposed picture element markup to deliver the appropriate image asset based on source elements with media queries, but it came with the common drawback that the fallback image request could not be prevented, incurring unnecessary

w3.org/community/respimg/

Get involved!

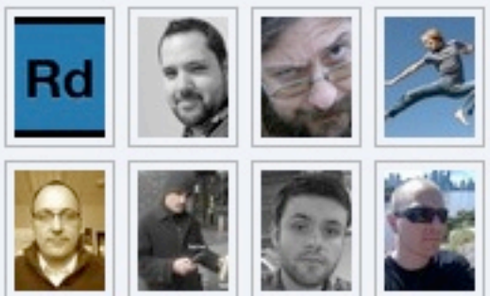
Anyone may join this Community Group. All participants in this group have signed the W3C Community Contributor License Agreement (CLA).

JOIN THIS GROUP

or request an account

Participants

Mathew Marquis
Chair



- A Flexible Grid
- Media Queries
- Flexible Images and Media

Progressive Enhancement

“

An escalator can never break— it can only become stairs.

MITCH HEDBERG

Basic Experience

Enhanced Experience

Basic Experience

Enhanced Experience

basic.css

- Basic typography
- Horizontal rules
- Text alignment
- display: inline / block

Basic Experience

Enhanced Experience

basic.css

enhanced.css

- @font-face
- Site-wide styles
- General layout
- Media queries

Basic Experience

Enhanced Experience

```
<link rel="stylesheet" href="/css/basic.css">
<link rel="stylesheet" href="/css/enhanced.css" media="only all">
```

“

If you’re awesome—or you’re Internet Explorer—you get enhanced.

ETHAN MARCOTTE

```
<link rel="stylesheet" href="basic.css" id="basic">

<!--[ if ( gte IE 6 ) & ( lte IE8 ) ]>
    <link rel="stylesheet" href="enhanced.css">
<![endif]-->
<!--[ if ( !IE ) | ( gte IE 9 ) ]><!-->
    <link rel="stylesheet" href="enhanced.css" media="only all">
<!--<![endif]-->
```

Basic Experience

basic.css

basic.js

- Modernizr for conditional script loading
- Conditional stylesheet loading
- ResponsiveImages.js
- Respond.js

Enhanced Experience

enhanced.css

github Search... Explore Gist Blog Help Wilto 612

scottjehl / Respond

Unwatch Your Fork Pull Request 2,113 155

Code Network Pull Requests 7 Issues 23 Wiki 0 Stats & Graphs

A fast & lightweight polyfill for min/max-width CSS3 Media Queries (for IE 6-8, and more) — Read more

Clone in Mac ZIP SSH HTTP Git Read-Only git@github.com:scottjehl/Respond.git Read+Write access

branch: master Files Commits Branches 7 Tags 4 Downloads

Latest commit to the master branch

Merge pull request #104 from scottjehl/cross-domain

scottjehl authored 16 days ago commit b21c5785e8

Respond /

name	age	message	history
cross-domain	2 months ago	Trimming whitespace. [doctyper]	
test	2 months ago	Non-min/max media queries are not supported by Respond, and therefore… [scottjehl]	
README.md	2 months ago	clarified IE font-face-within-mqs limitation. Now appears to cause a … [scottjehl]	
respond.min.js	23 days ago	styled fakeBody to have background: none, preventing IE crashes when … [scottjehl]	
respond.src.js	23 days ago	styled fakeBody to have background: none, preventing IE crashes when … [scottjehl]	

github.com/scottjehl/Respond

README.md

Respond.js

Basic Experience

basic.css

basic.js

Enhanced Experience

enhanced.css

enhanced.js

feature-specific.js

feature-specific.css

page-specific.css

```
<script src="lib/jquery.js,touch.js"></script>
<link href="css/section-sports.css,page-redsox.css,touch.css">
```

The Boston Globe

Obama urges Congress to act on jobs bill

Speaking from the Rose Garden, President Obama brandished a copy of the legislation and bluntly challenged: ‚Äò‚ÄòNo games, no politics, no delays.‚Äô‚Äô

- Opinion: A $450 billion grab bag

House Democrats to meet privately on casino bill

The noon meeting of Massachusetts House Democrats tomorrow wi focus on the casino bill as well as 150 other amendments.

- Casino-plan fears cross town lines
- Gambling panel‚Äôs role called crucial

Day of emotion as nation looks back

The 10th anniversary of the Sept. 11, 2001, terrorist attacks brought together families of the nearly 3,000 killed and thousands more who gathered to grieve and reflect.

- Photos: 9/11 ceremonies
- Mass. events commemorate Sept. 11 attacks
- Up from the ashes

Globe starts far-ranging paid website for all devices

The Boston Globe today launches a new subscription-only website, BostonGlobe.com, betting that readers will be willing to pay for an online product that offers an innovative, inviting reading experience.

flickr.com/photos/splorp/6141775264

“

A carpenter is only as good as his tools, but only a shitty carpenter blames them.

DAN MARQUIS