

Responsive Typography

Design for Meaning, Not for Screen Size

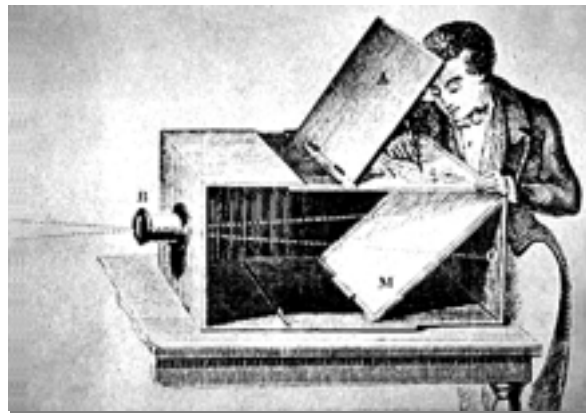
What We'll Cover

- + Lies & deceptions about art & science
- + Understanding the value of hats
- + What is Responsive Typography
- + Practicing the Four P's

Art & Science: A Historical Romance



DaVinci?
That guy would code



Vermeer:
Master or Technician?



Tim Jenison
Artist or Inventor?

Is Tim an artist or is Tim an inventor? I think the problem is not trying to pick one of these things for Tim to be – *the problem is that we have that distinction*

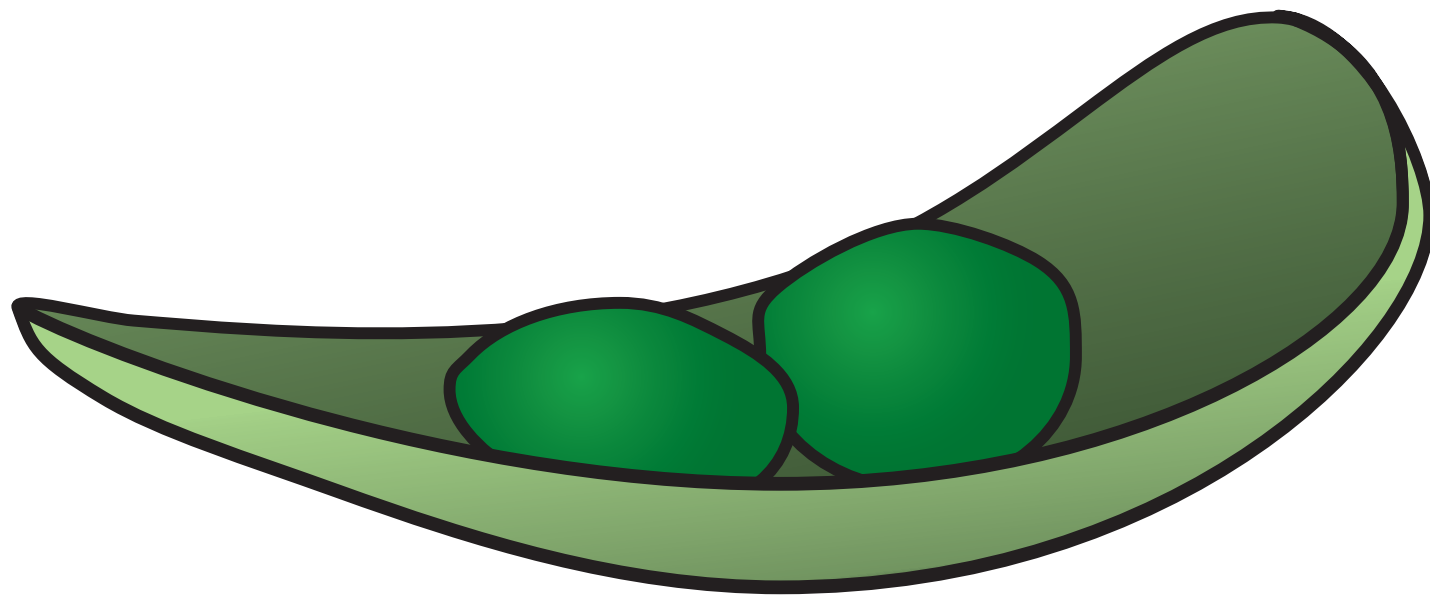
-Penn Jillette in 'Tim's Vermeer'

Art is inherently tied to the technology we use to create it

No matter how much we try to ignore it

Art+Science

Design+Development



**When is our industry going stop calling it
“web” typography?**

@sblakeborough, via twitter

We can't.

- + *(Insert Ginger Rogers analogy here)*
- + Encompasses all of what you know about type & its use *but*
- + Typography on the web requires additional consideration *(art & science)*
- + Our canvas is fluid; constantly expanding & contracting
- + Reading on screens will only increase

Type Is the Voice of Your Words

+ Words have meaning, *but letters have emotion*

Type Is the Voice of Your Words

+ Words have meaning, *but letters have emotion*

I love you

Type Is the Voice of Your Words

+ Words have meaning, *but letters have emotion*

I love you

Type Is the Voice of Your Words

- + Words must first be read
before they can be understood

Type Is the Voice of Your Words

- + Words must first be read
before they can be understood

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

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**Four score and seven years ago our fathers brought forth
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Type Is the Voice of Your Words

- + Legible means you ***can*** read it
- + Readable means you might actually ***want*** to

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A tale of a curious affliction

Type Is the Voice of Your Words

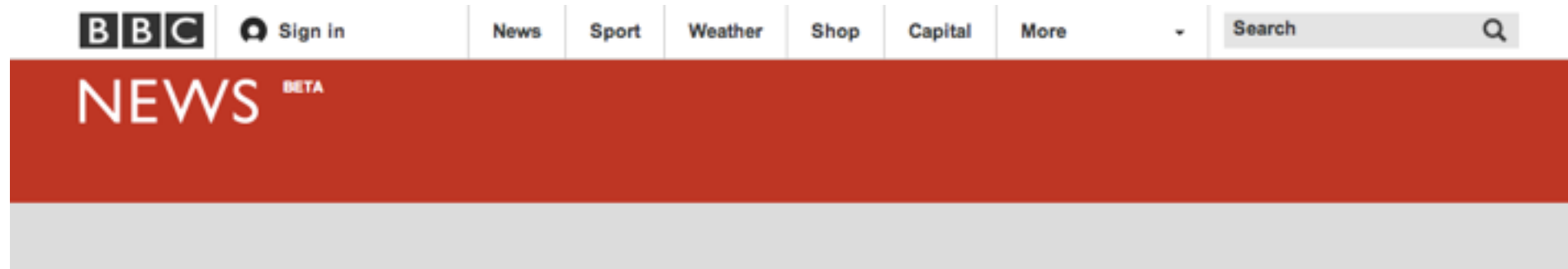
- + Legible means you ***can*** read it
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A tale of a curious affliction

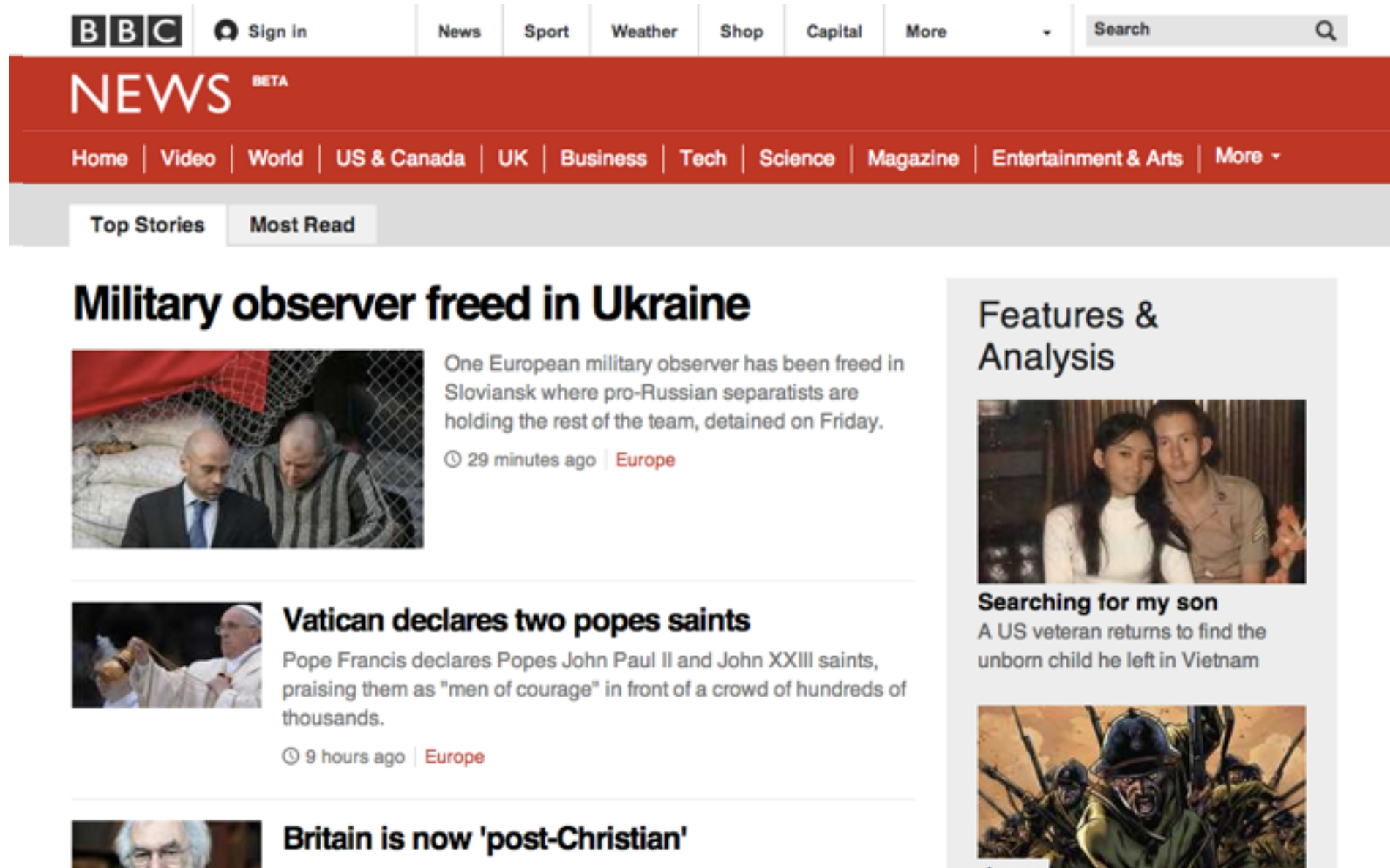
A Design Dilemma: What We Don't Know

- + Screen size
- + Device capabilities
- + Concurrent activities
- + Depth of focus
- + Purpose of visit

Focus on What's Left: Typography



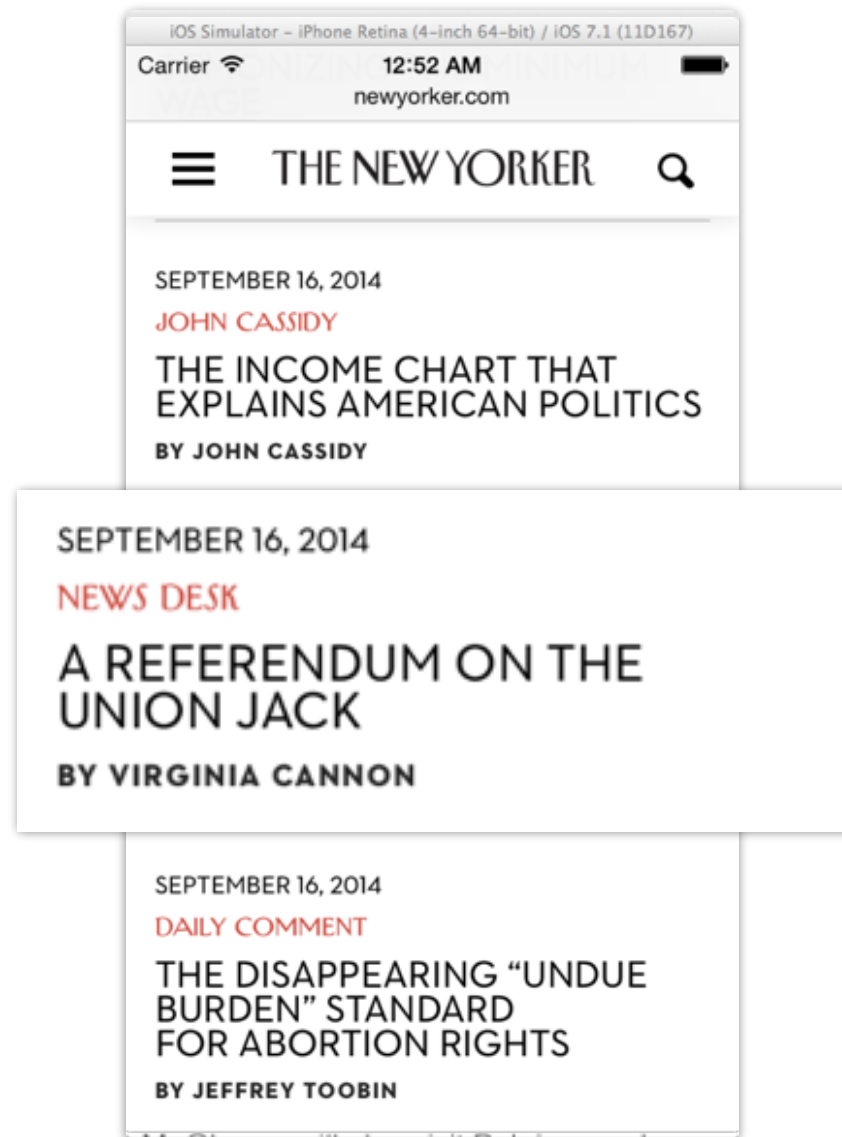
Focus on What's Left: Typography



Focus on What's Left: Typography



Focus on What's Left: Typography



Responsive Typography: Four Simple Steps

- + **Performance:** select fonts with care, load what you need & don't block the page draw
- + **Progressive:** plan for failure, tune up the loading process & fallback fonts to minimize FOUT
- + **Proportion:** small screens demand subtle scale
- + **Polish:** Design IS the details: OpenType & then some

Performance

Performance Matters

- + Great typography isn't 'I used all of them'
- + Load only what you need

Trade Gothic Next LT Pro **Bold**

this is a typeface

this is a font

- + Each font has a performance cost,
so **budget wisely**

Performance Matters

The screenshot shows the Adobe Typekit Editor interface for a kit named "Responsive Typography | Typekit". The URL in the browser is https://typekit.com/kit_editor/kits/yjh7qxn#family-dxzd. The interface includes a left sidebar with sections for Selectors, Language Support, Weights & Styles, and CSS Stack. The main area displays a welcome message and two font preview sections: "Franklin Gothic URW by URW++" and "Quatro Slab by ps Type". The "Kit Size" is highlighted with an orange circle, showing "449K" for 2 fonts and 2 selectors. A "Publish" button is visible at the bottom right, with a note indicating that changes won't be live until published.

Responsive Typography | Typekit

https://typekit.com/kit_editor/kits/yjh7qxn#family-dxzd

Adobe Typekit Editor [Embed Code](#) | [Kit Settings](#)

Selectors

[Add](#)

`.tk-quatro-slab`

[Using fonts in CSS](#)

Welcome! Here's how to use fonts:

In the left column, use the *Selectors* section to apply fonts to any **HTML tag**, **class**, or **id**. You can also add the default class to your markup. Then, click Publish to see those changes on your site.

Language Support

☐ All Characters 299k

☒ Default 261k

[Which should I choose?](#)

Franklin Gothic URW by URW++ [Delete this font](#)

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz

Weights & Styles 10/10

Include these in your kit:

- ☒ Regular 32k
- ☒ Italic 34k
- ☒ Medium 21k
- ☒ Medium Italic 23k
- ☒ Semibold 21k
- ☒ Semibold Italic 22k
- ☒ Bold 31k
- ☒ Bold Italic 34k
- ☒ Ultra Black 21k
- ☒ Ultra Black Italic 22k

[Using weights & styles in your CSS](#)

Quatro Slab by ps Type [Delete this font](#)

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWw

Kit Size: 449K 2 fonts, 2 selectors, for Responsive Typography

[Publish](#)

Changes won't be live on your site until you publish them.

Performance Matters

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Responsive Typography | Typekit

https://typekit.com/kit_editor/kits/yjh7qxn#family-dxzd

Adobe Typekit Editor [Embed Code](#) [Kit Settings](#)

Selectors

[Add](#)

.tk-franklin-gothic-urw [Using fonts in CSS](#)

Language Support

☐ All Characters 172k

☒ Default 90k [Which should I choose?](#)

Weights & Styles 4/9

Include these in your kit:

<input type="checkbox"/> Light	21k
<input checked="" type="checkbox"/> Book	23k
<input checked="" type="checkbox"/> Book Italic	23k
<input type="checkbox"/> Medium	23k
<input type="checkbox"/> Medium Italic	23k
<input checked="" type="checkbox"/> Demi	22k
<input checked="" type="checkbox"/> Demi Italic	22k
<input type="checkbox"/> Heavy	15k
<input type="checkbox"/> Heavy Italic	16k

[Using weights & styles in your CSS](#)

CSS Stack

Welcome! Here's how to use fonts:

In the left column, use the *Selectors* section to apply fonts to any **HTML tag**, **class**, or **id**. You can also add the default class to your markup. Then, click Publish to see those changes on your site.

Franklin Gothic URW by URW++ [Delete this font](#)

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz

Quatro Slab by ps Type [Delete this font](#)

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWw

Changes won't be live on your site until you publish them.

Kit Size: 121K 2 fonts, 2 selectors, for Responsive Typography [Publish](#)

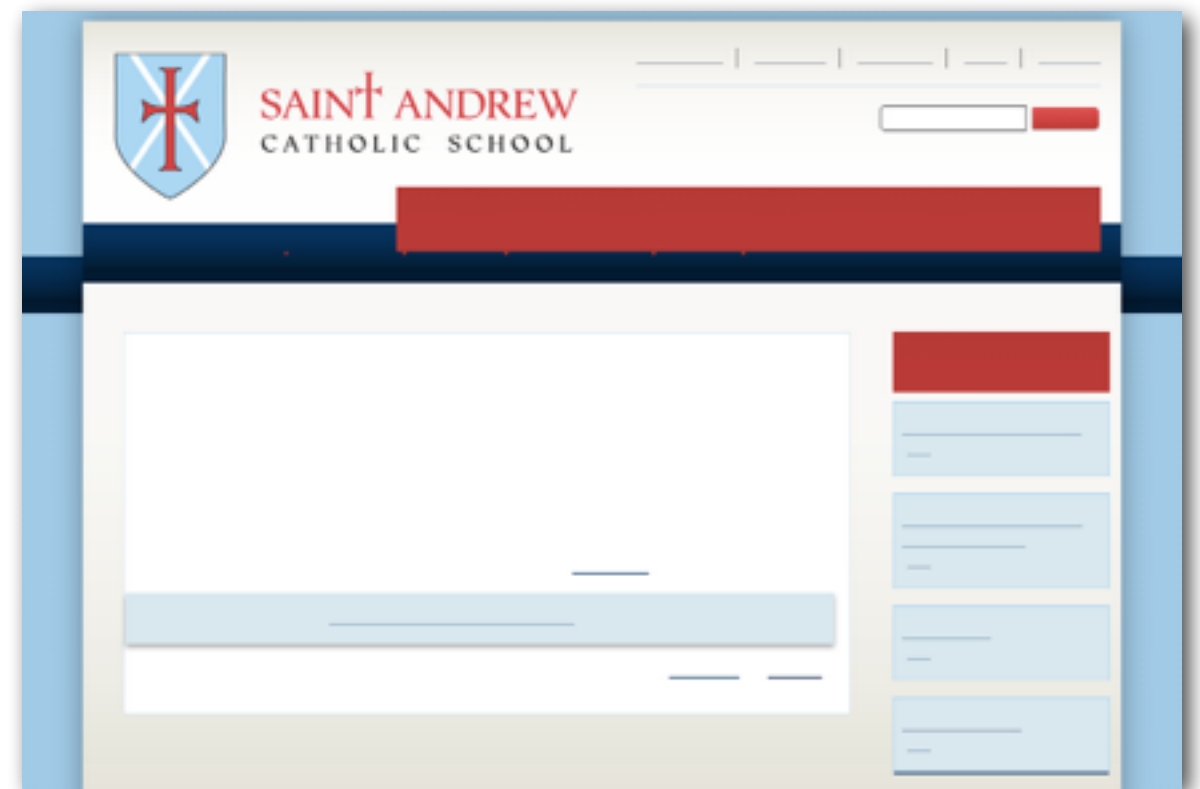
Progressive Performance

```
<!-- NEEDED -->
<script type="text/javascript">
  WebFontConfig = {
    google: { families: [ 'Roboto Slab:700', 'Roboto:400,400italic,700italic,700' ] }
  };
  (function() {
    var wf = document.createElement('script');
    wf.src = ('https:' == document.location.protocol ? 'https' : 'http') +
      '://ajax.googleapis.com/ajax/libs/webfont/1/webfont.js';
    wf.type = 'text/javascript';
    wf.async = 'true';
    var s = document.getElementsByTagName('script')[0];
    s.parentNode.insertBefore(wf, s);
  })();
</script>

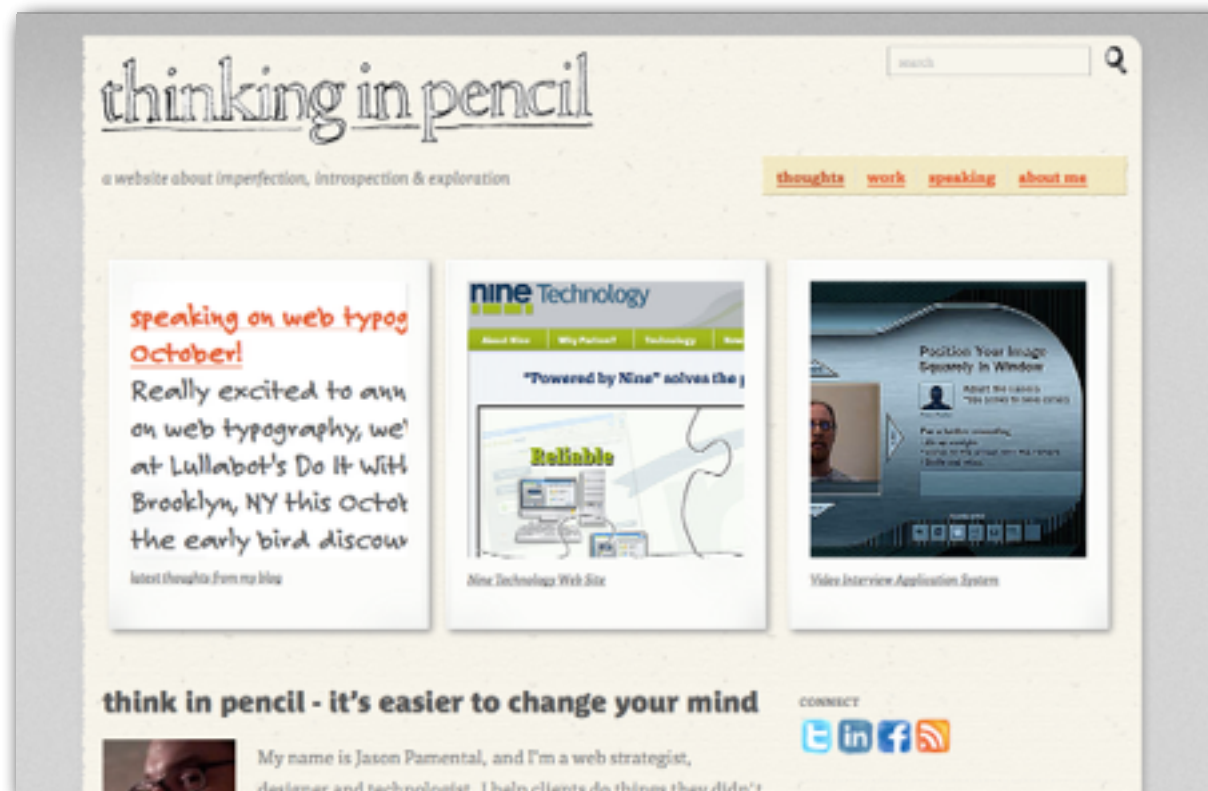
<!-- NEEDED FOR NO JS AVAILABILITY -->
<noscript>
  <!-- Use this in as a fallback to no javascript being available -->
  <link href='http://fonts.googleapis.com/css?family=Roboto+Slab:700|Roboto:400,400italic,700italic,700'
    rel='stylesheet' type='text/css'>
</noscript>
```

Progressive Enhancement

FOUT is *OUR* fault



FOUT is *OUR* fault



FOUT is *OUR* fault

- + Use these: **.wf-inactive** / **.wf-active**

- + This CSS results in a blank screen during load:

```
body { font-family: "Trade Gothic", helvetica, arial; }
```

- + Add this & give them content, then fonts:

```
.wf-inactive body { font-family: helvetica, arial; }
```

- + Adjust **font-size**, **line-height**, **letter-spacing**
to avoid jumpiness

- + Making it easy since **2010**

Progressively Enhance



Web fonts loaded

Progressively Enhance



No web fonts, uncorrected

Progressively Enhance



No web fonts, corrected

Progressively Enhance



Web fonts loaded

Backwards Compatible, Future Friendly

```
<!-- NEEDED -->
<script type="text/javascript">
  WebFontConfig = {
    google: { families: [ 'Roboto Slab:700', 'Roboto:400,400italic,700italic,700' ] }
  };
  (function() {
    var wf = document.createElement('script');
    wf.src = ('https:' == document.location.protocol ? 'https' : 'http') +
      '://ajax.googleapis.com/ajax/libs/webfont/1/webfont.js';
    wf.type = 'text/javascript';
    wf.async = 'true';
    var s = document.getElementsByTagName('script')[0];
    s.parentNode.insertBefore(wf, s);
  })();
</script>

<!-- NEEDED FOR NO JS AVAILABILITY -->
<noscript>
  <!-- Use this in as a fallback to no javascript being available -->
  <link href='http://fonts.googleapis.com/css?family=Roboto+Slab:700|Roboto:400,400italic,700italic,700'
    rel='stylesheet' type='text/css'>
</noscript>
```

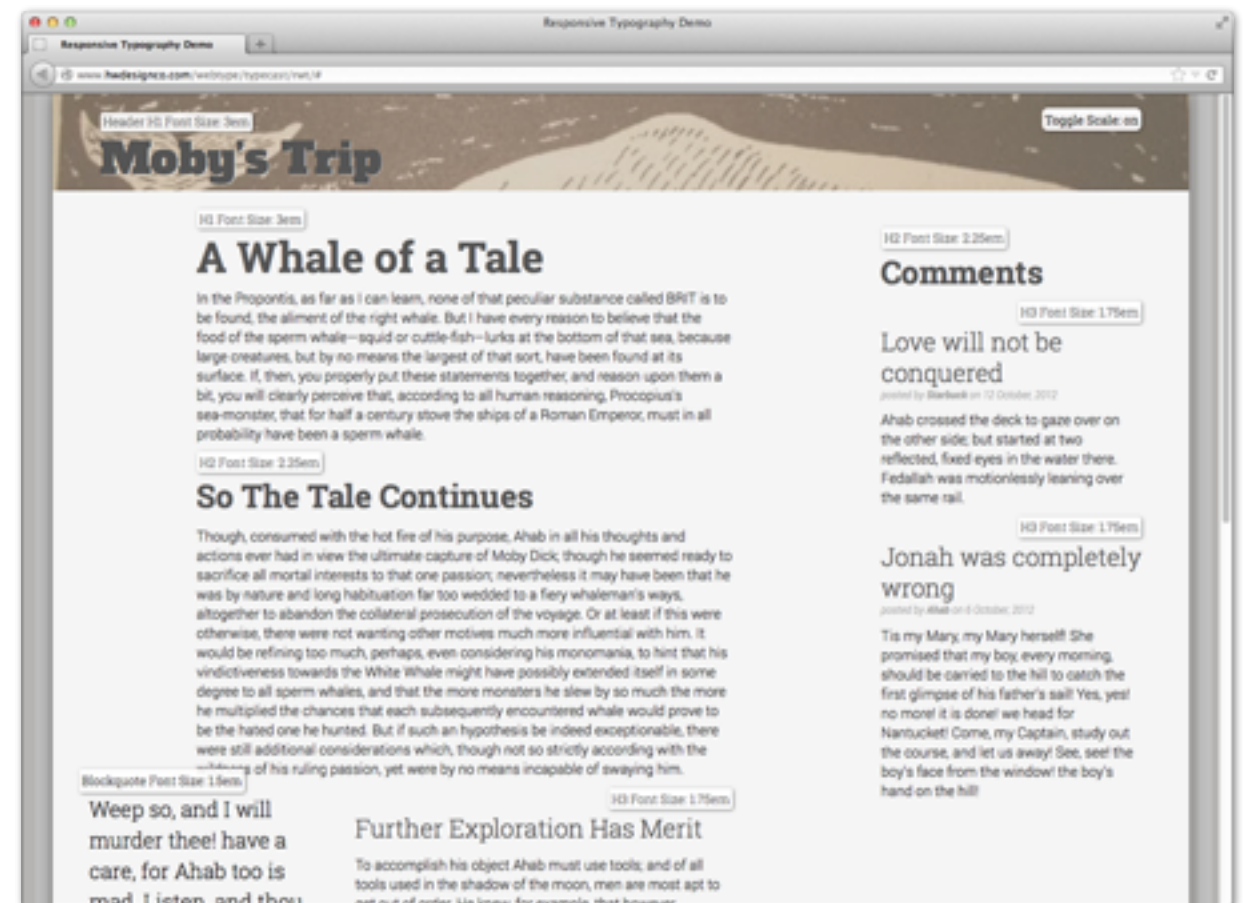
Proportion

Proportion: one size won't do

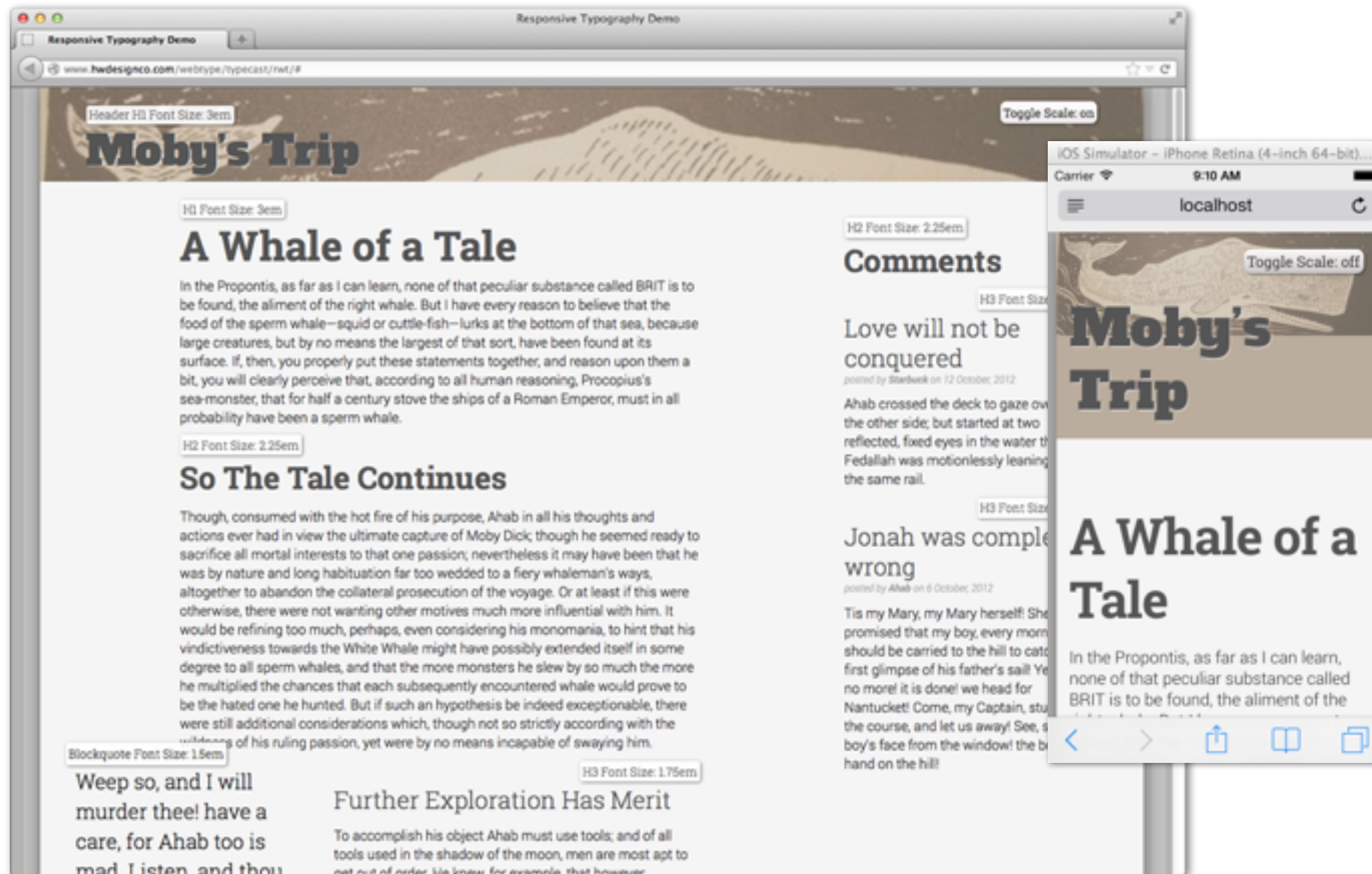
	1	1.25			
DESKTOP	H_1	H_2	H_3	H_4	
	3 1.05	2.25 1.25	1.75 1.25	1.75 1.25	
MOBILE	H_1	H_2	H_3	H_4	
	2 1.25	1.625 1.15384615	1.375 1.13636364	1.125 1.125	

Desktop geese & handheld gander

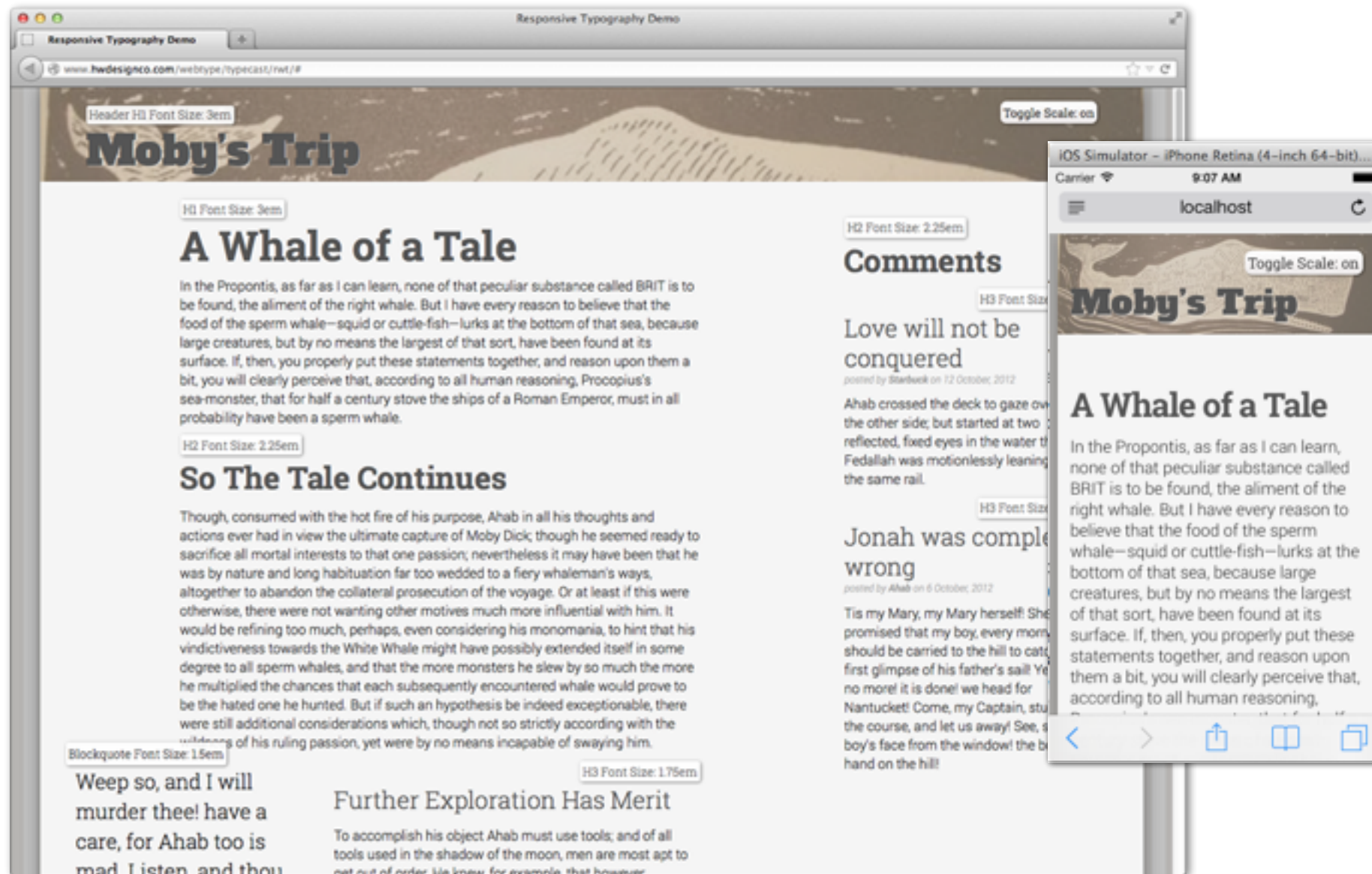
- + Small canvas requires subtle proportions
- + What works in print... works in print
- + Robert Bringhurst matters, but scale must adapt



For example...



For example...



A More Modern Scale

	Print	Desktop (large)	Desktop	Tablet (large)	Tablet (small)	Phone
Body	<ul style="list-style-type: none"> Font size: 12pt Line height: 1.25 Line length: 60-75 	<ul style="list-style-type: none"> 16px (1em) 1.375 60-75 	<ul style="list-style-type: none"> 16px (1em) 1.375 60-75 	<ul style="list-style-type: none"> 16px (1em) 1.375 60-75 	<ul style="list-style-type: none"> 16px (1em) 1.25 60-75 	<ul style="list-style-type: none"> 16px (1em) 1.25 35-40
H1	<ul style="list-style-type: none"> Font size: 36pt (3em) Line height: 1.25 	<ul style="list-style-type: none"> 48px (3em) 1.05 	<ul style="list-style-type: none"> 48px (3em) 1.05 	<ul style="list-style-type: none"> 40px (2.5em) 1.125 	<ul style="list-style-type: none"> 32px (2em) 1.25 	<ul style="list-style-type: none"> 32px (2em) 1.25
H2	<ul style="list-style-type: none"> Font size: 24pt (2em) Line height: 1.25 	<ul style="list-style-type: none"> 36px (2.25em) 1.25 	<ul style="list-style-type: none"> 36px (2.25em) 1.25 	<ul style="list-style-type: none"> 32px (2em) 1.25 	<ul style="list-style-type: none"> 26px (1.625em) 1.15384615 	<ul style="list-style-type: none"> 26px (1.625em) 1.15384615
H3	<ul style="list-style-type: none"> Font size: 18pt (1.5em) Line height: 1.25 	<ul style="list-style-type: none"> 28px (1.75em) 1.25 	<ul style="list-style-type: none"> 28px (1.75em) 1.25 	<ul style="list-style-type: none"> 24px (1.5em) 1.25 	<ul style="list-style-type: none"> 22px (1.375em) 1.13636364 	<ul style="list-style-type: none"> 22px (1.375em) 1.13636364
H4	<ul style="list-style-type: none"> Font size: 14pt (1.16666667em) Line height: 1.25 	<ul style="list-style-type: none"> 18px (1.125em) 1.22222222 	<ul style="list-style-type: none"> 18px (1.125em) 1.22222222 	<ul style="list-style-type: none"> 18px (1.125em) 1.22222222 	<ul style="list-style-type: none"> 18px (1.125em) 1.11111111 	<ul style="list-style-type: none"> 18px (1.125em) 1.11111111
Blockquote	<ul style="list-style-type: none"> Font size: 24pt (2em) Line height: 1.45833333 	<ul style="list-style-type: none"> 24px (1.5em) 1.45833333 	<ul style="list-style-type: none"> 24px (1.5em) 1.45833333 	<ul style="list-style-type: none"> 24px (1.5em) 1.45833333 	<ul style="list-style-type: none"> 20px (1.25em) 1.25 	<ul style="list-style-type: none"> 20px (1.25em) 1.25

Polish

Polish: Don't Forget Fit & Finish

Moby's Trip

TOGGLE OT FEATURES: OFF

A Whale of an Afflicted Tale

In the Propontis, as far as I can learn, none of that peculiar substance called BRIT is to be found, the aliment of the right whale. But I have every reason to believe that the food of the sperm whale—squid or cuttle-fish—lurks at the bottom of that sea, because large creatures, but by no means the largest of that sort, have been found at its surface.

1/2 Way to 19 Thousand Leagues

Though, consumed with the hot fire of his purpose, Ahab in all his thoughts and actions ever had in view the ultimate capture of Moby Dick: though he seemed ready to sacrifice

Polish: Don't Forget Fit & Finish

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Polish: Don't Forget Fit & Finish

Civilization and sea power arose from the temperate Mediterranean, and the progress of archeological research has shown that civilizations and empires had been reared in the Mediterranean on sea power long before the dawn of history.

We know, for instance, that an Egyptian king some 2000 years before Christ possessed a fleet of 400 fighting ships. But it appears now that long before this time the island of

Crete was a great naval and commercial power. Indeed, the Cretans may have taught the Egyptians something of the art of building sea-going ships for trade and war.¹

"Neither deals unfairly with the other; the Carthaginians never touch the gold till it comes up to the estimated value of their goods, nor do the natives carry off the goods till the gold has been taken away."
— Herodotus²

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Polish: Don't Leave Orphans Behind

- + Typogrify FTW:
<http://bit.ly/rt-tpgrfy>
<http://bit.ly/drupaltypogrify>
<http://bit.ly/rt-tpgrfy-ee>
<http://bit.ly/rt-tpgrfy-wp>
- + Also try Widowtamer for JS drop-in solution:
<http://bit.ly/rt-widotamer>
- + Seems small, but has oversized impact to user & editor

If so, how is the system to be changed? “How do you eat an elephant?” she replied. “Well! I’m patient. Rome wasn’t built in a day.” (She was born in Rome.) But there is at least a new awareness of what’s at stake. She singled out the pioneering example of François-Henri Pinault, C.E.O. of the luxury conglomerate Kering (Gucci, Bottega Veneta, Stella McCartney), who has invested many millions in creating eco-friendly brands.

A Little in Abundance is a Lot

- + Use max-width on elements to keep text readable

```
@media (min-width: 58em) {  
  p { max-width: 38em; }  
}
```

- + CSS3 brings character counts, but not universal
(vw & vh, ch & cx)

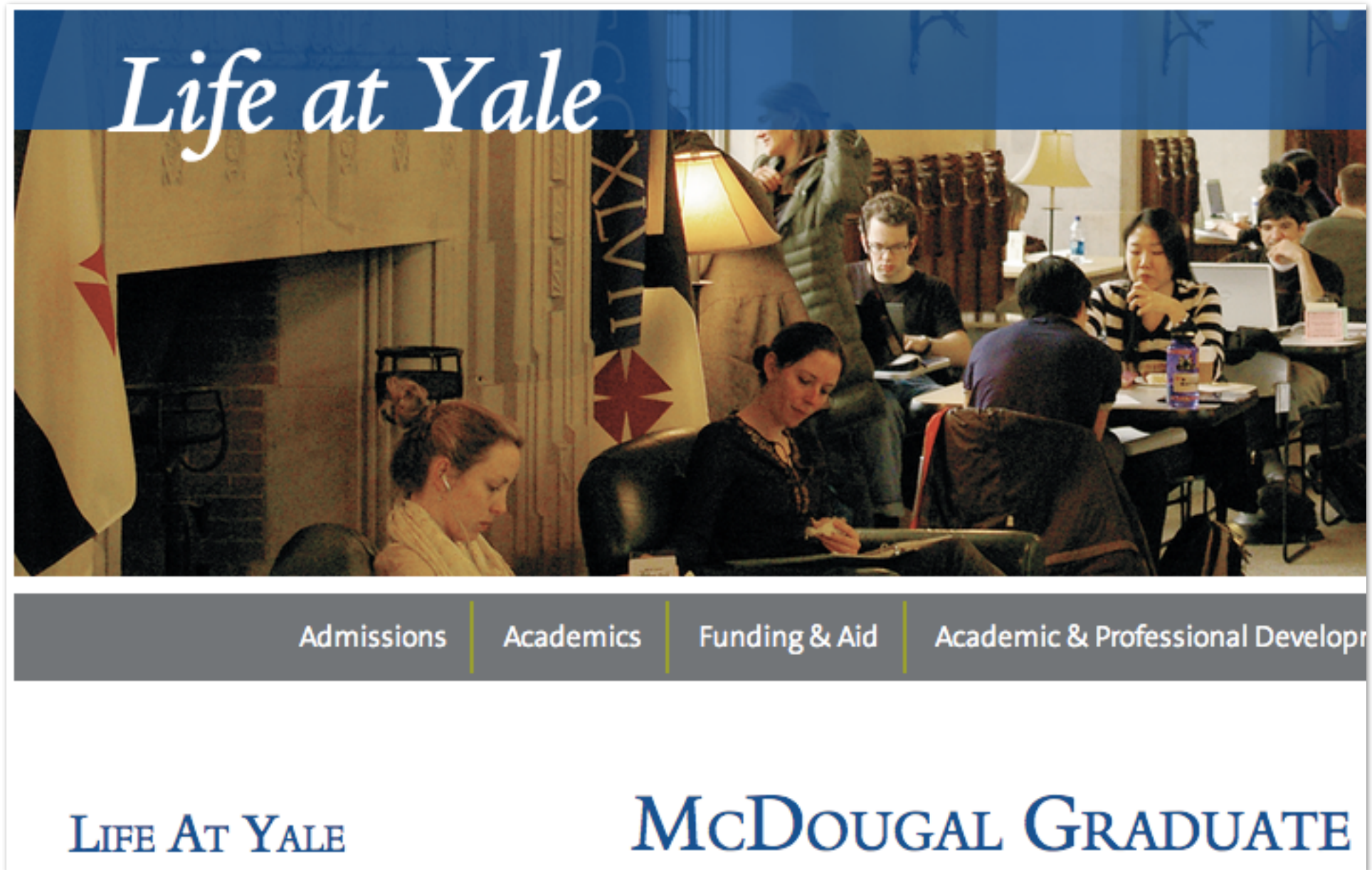
- + **EMs** or **REMs**, but no PX

- + Don't forget: use real content!
Because Lorem Ipsum is a poser

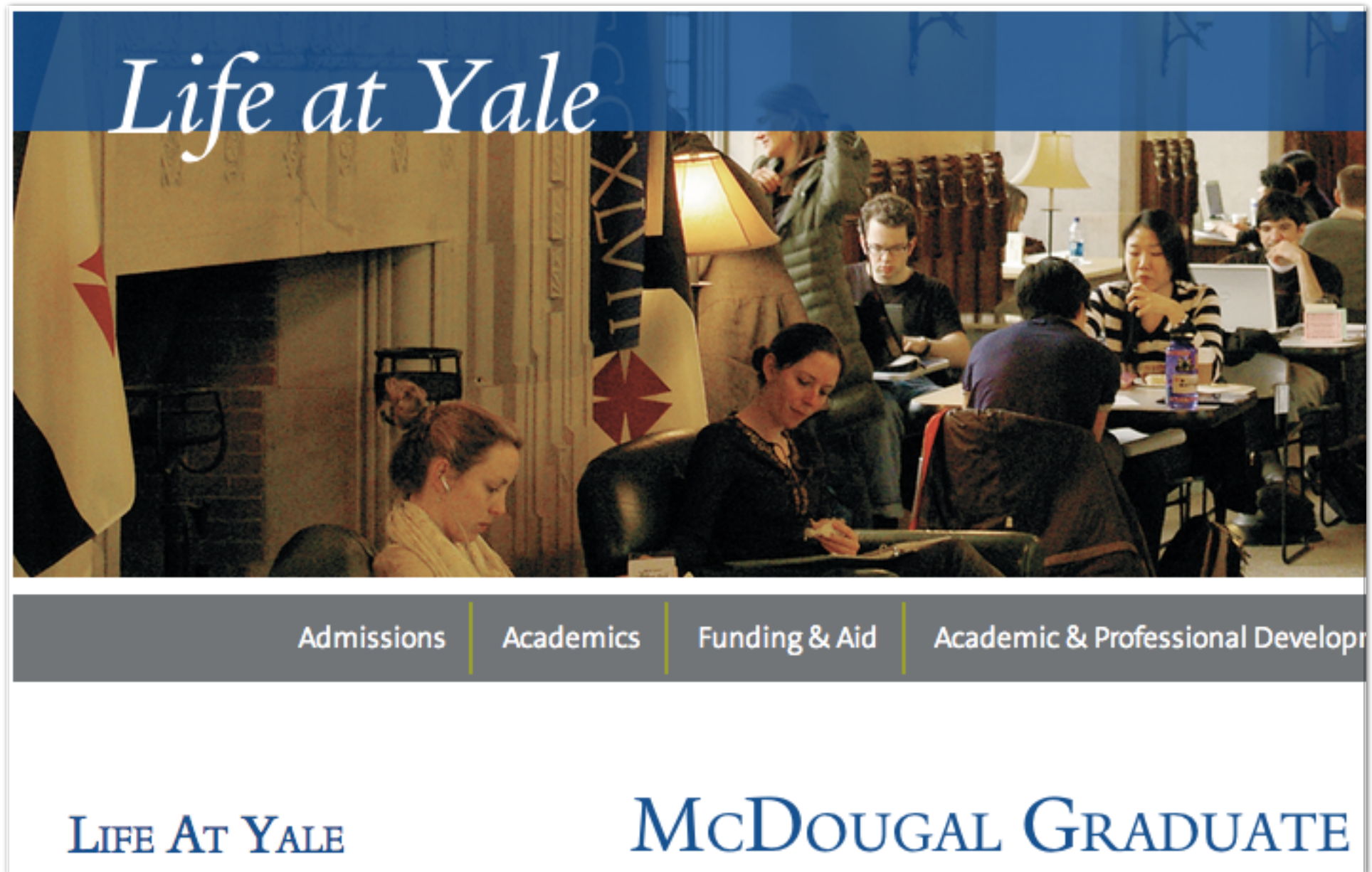
New Tricks

- + Emerging attributes:
font-size-adjust & font-smoothing
- + The future is here; it's just not evenly distributed
- + Try text-rendering engine detection
w/font-smoothing
(<http://typerendering.com> courtesy of @NiceWebType & @bramstein)

True Life Story



True Life Story



- webkit-font-smoothing: antialiased;
- moz-osx-font-smoothing: grayscale;

A Perfect Page

A Perfect Page

or at least a far better start

Inspiration

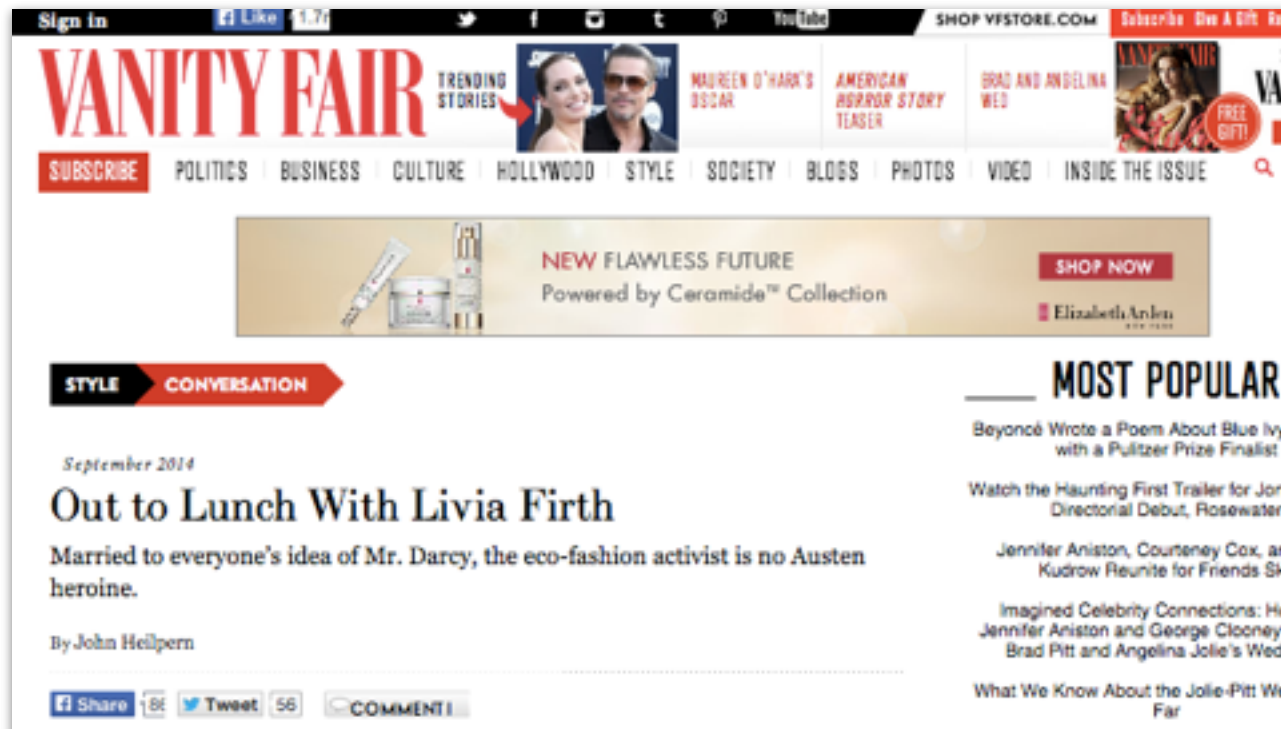


Inspiration

- + Oversize 2-level header
- + Stylized subhead
- + Byline
- + Large initial cap
- + Inset photo
- + Pull-quote



Frustration

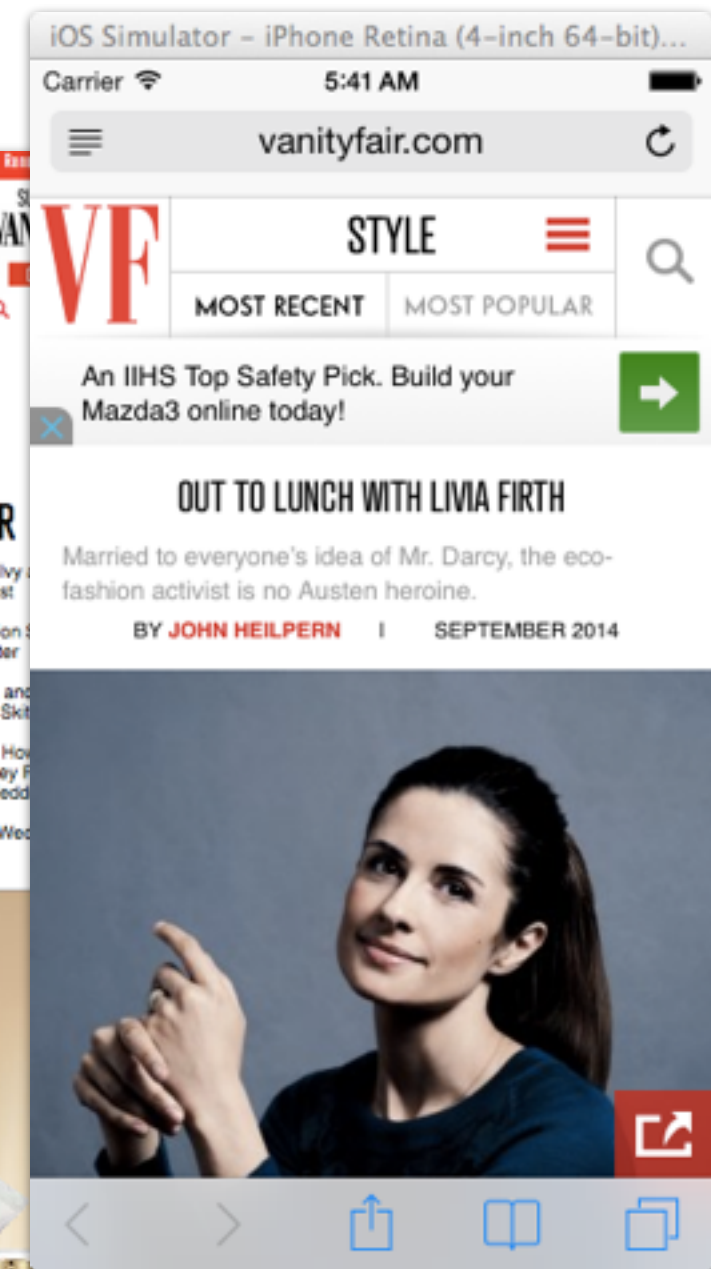


The first thing we know about Livia Firth—though by no means the last—is that she's married to Mr. Darcy, or to every woman's idea of the most charming, handsome Englishman on the planet, Colin Firth. But Mrs. Firth ("Call me Livia, please") is no Jane Austen heroine.

She's a strikingly vivacious Italian who arrived for lunch at Gobo on the Upper East Side of Manhattan looking eager and dazzling in black. Her informal eco-stylishness defines her. Her jacket, she explained in her Anglo-Italian accent, was from a French brand, Kami Organic, and was made with recycled leather and organic wool; her T-shirt was from the U.S. brand Stewart & Brown, specialists in organic cotton; her trousers, from the London shop Joseph, weren't "eco" or "ethical," however, but several years old and therefore "sustainable"; her shoes were of handmade leather from a local family-run factory in Umbria—where her own family lives and she and her husband keep a house. Her watch was made of discarded wood, but let's not go into that now.



PHOTOGRAPH BY JULIAN BROAD.



A Sneak Peek

September 2014

Out to Lunch With

LIVIA FIRTH

MARRIED TO EVERYONE'S IDEA OF MR. DARCY, THE ECO-FASHION ACTIVIST IS NO AUSTEN HEROINE.

By JOHN HEILPERN

The first thing we know about Livia Firth—though by no means the last—is that she's married to Mr. Darcy, or to every woman's idea of the most charming, handsome Englishman on the planet, Colin Firth. But Mrs. Firth ("Call me Livia, please") is no Jane Austen heroine.

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Realization

- + Oversize 2-level header
- + Stylized subhead
- + Byline
- + Large initial cap
- + Inset photo
- + Pull-quote
- + Virtually no extra markup necessary
- + Fully responsive



Realization



Responsive Web Typography

- + Yes, it's a thing
- + It's about **adapting** to screen **size**, network **speed** & device **capabilities**
- + It's about **designing** for what's **next**
 - Last Winter Olympics: *there was no iPad*
 - The one before? *No iPhone either*

Responsive Web Typography

+ Performance

- Stats, Platforms & Screen Tests

+ Progression (It's the web. Stuff breaks)

- If the font fails, does your design hold up?

+ Proportion

- It's about composition (think: small paintings)

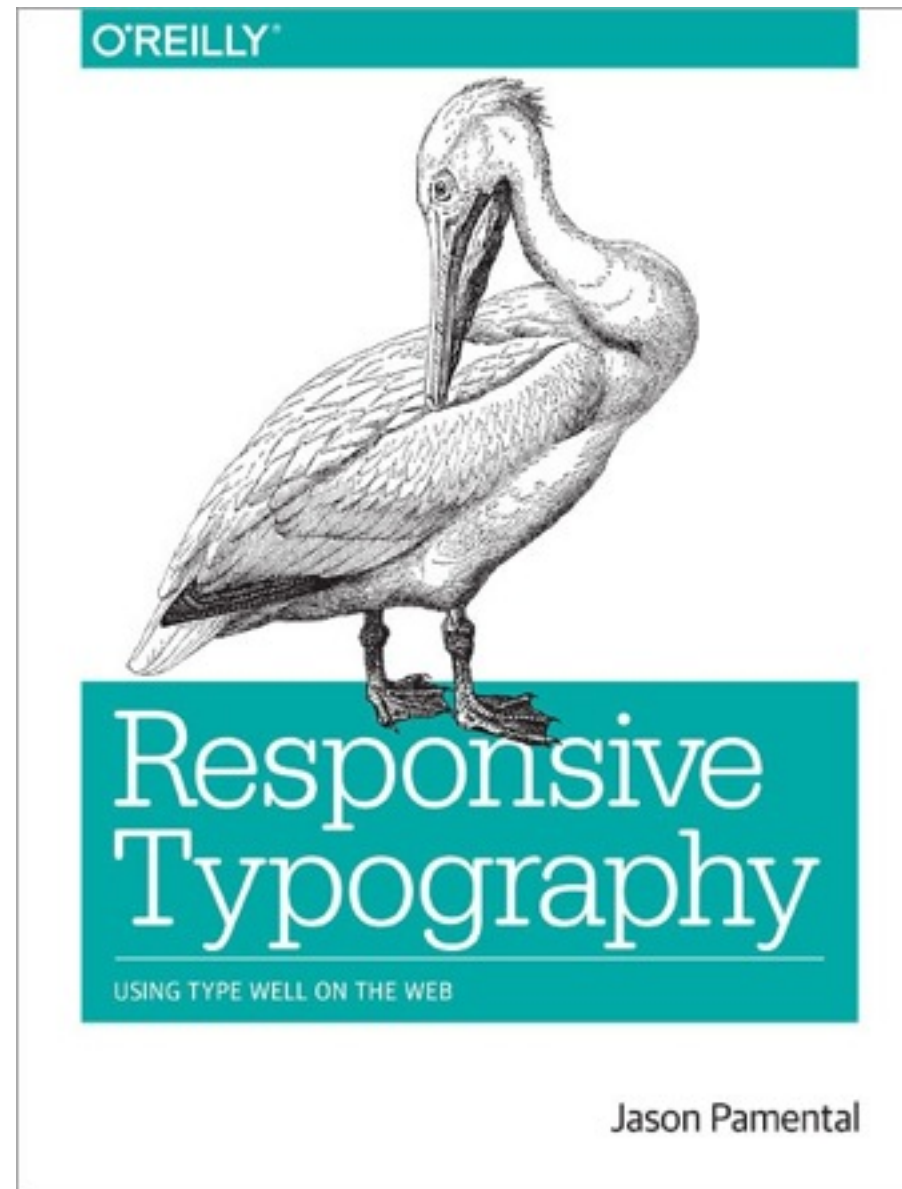
+ Polish

- Great typography is greater than the sum of its parts

“Designers Should Code As Much As Artists Should Mix Paint”

*~ Mustafa Kurtuldu (@Mustafa_x)
FOWD London*

Just out!



<http://bit.ly/rwtbook>

Thank You

Jason Pamental (@jpamental)

Slides: <http://bit.ly/jpartpvd14>

Code: <http://bit.ly/rtwcode>