

Responsive Typography

Design for Meaning, Not for Screen Size

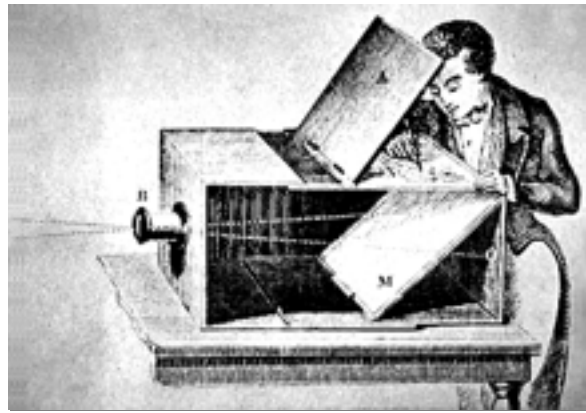
What We'll Cover

- + 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?



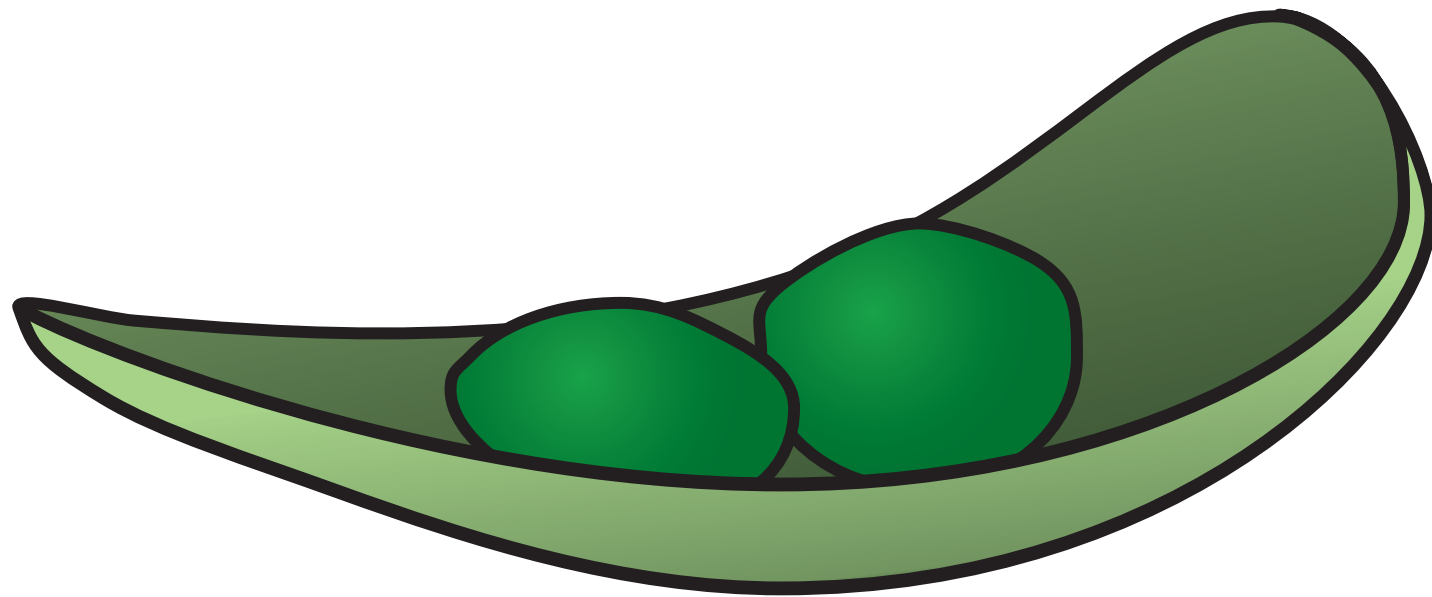
Tim Jenison
Artist or Inventor?

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+Science

Design+Development



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

No matter how much we try to ignore it

**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*

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

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.

Type Is the Voice of Your Words

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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

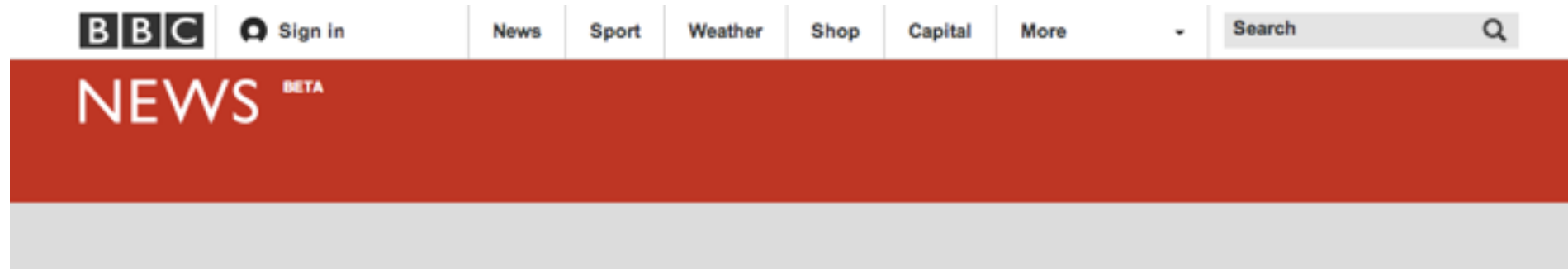
A tale of a curious affliction

Type Is the Voice of Your Words

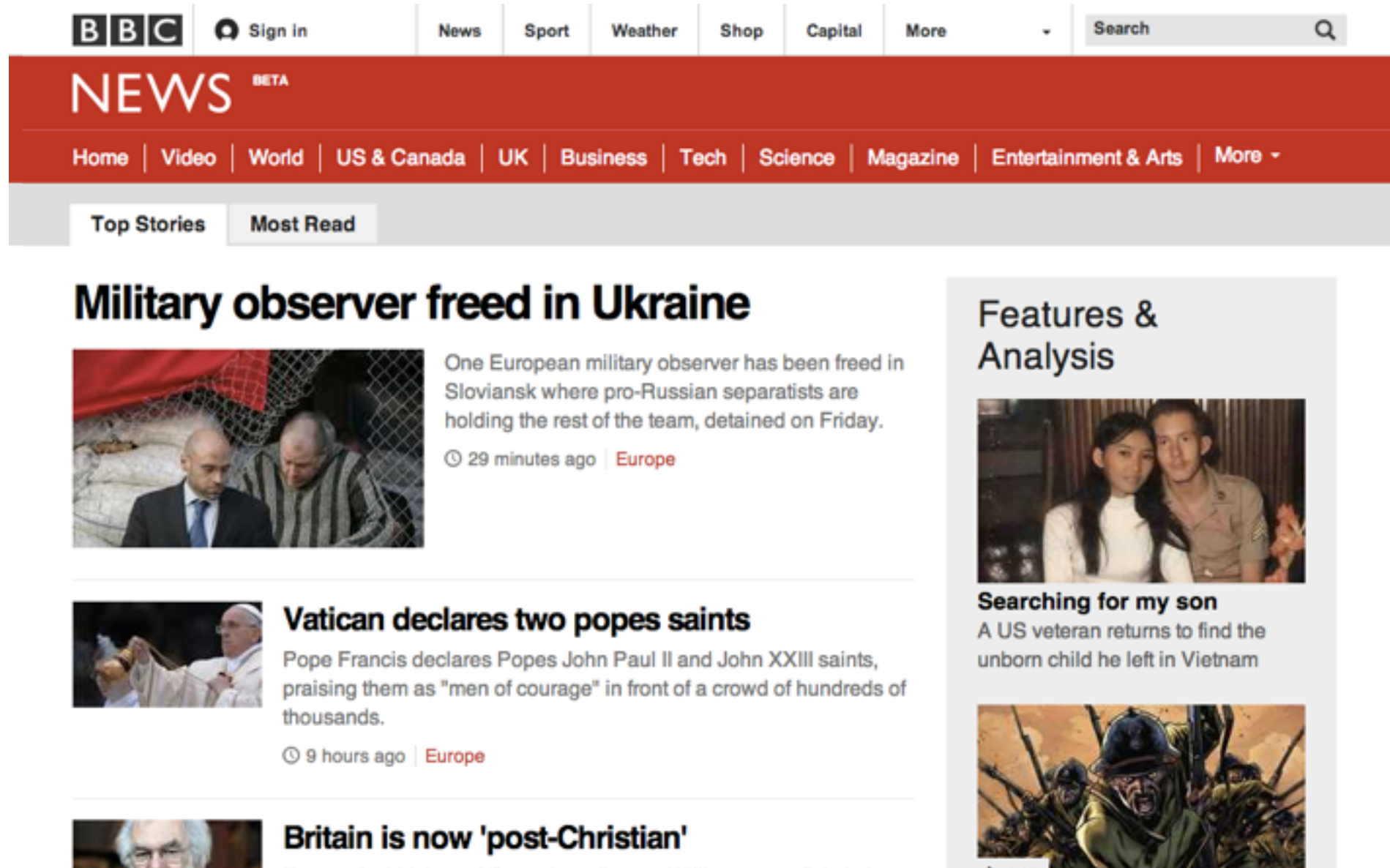
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A tale of a curious affliction

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 font kit named "Responsive Typography | Typekit". The URL in the browser is https://typekit.com/kit_editor/kits/yjh7qxn#family-dxzd. The interface is divided into a left sidebar and a main content area.

Left Sidebar:

- Selectors:** A text input field with ".tk-quadro-slab" and an "Add" button. Below it, a link "Using fonts in CSS".
- Language Support:** Two radio buttons: "All Characters" (299k) and "Default" (261k). Below it, a link "Which should I choose?".
- Weights & Styles:** A section titled "10/10" with the subtext "Include these in your kit:". It contains a list of font weights and styles with checkboxes and file sizes:
 - ☒ 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)Below the list is a link "Using weights & styles in your CSS".
- CSS Stack:** A section with a play button icon.

Main Content Area:

- A welcome message: "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."
- A font preview for "Franklin Gothic URW by URW++" showing the alphabet "AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz". A "Delete this font" link is in the top right.
- A font preview for "Quadro Slab by ps Type" showing the alphabet "AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWw". A "Delete this font" link is in the top right.

Bottom Bar:

- A dark bar at the bottom with the text "Kit Size: 449K 2 fonts, 2 selectors, for Responsive Typography". The "449K" is circled in orange.
- A "Publish" button on the right.
- A small notification bubble: "Changes won't be live on your site until you publish them."

Performance Matters

The screenshot shows the Adobe Typekit Editor interface for a kit named "Responsive Typography | Typekit". The URL in the address bar is https://typekit.com/kit_editor/kits/yjh7qxn#family-dxzd. The interface includes a left sidebar with sections: Selectors, Language Support, Weights & Styles, and CSS Stack. The main area displays a welcome message and two font families: Franklin Gothic URW and Quatro Slab. The Franklin Gothic URW font is highlighted in green, showing its alphabet. The Quatro Slab font is shown below it. At the bottom, the "Kit Size" is displayed as 121K, which is circled in orange. A "Publish" button is visible in the bottom right corner.

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:](#)

- ☐ Light 21k
- ☒ Book 23k
- ☒ Book Italic 23k
- ☐ Medium 23k
- ☐ Medium Italic 23k
- ☒ Demi 22k
- ☒ Demi Italic 22k
- ☐ Heavy 15k
- ☐ 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](#)

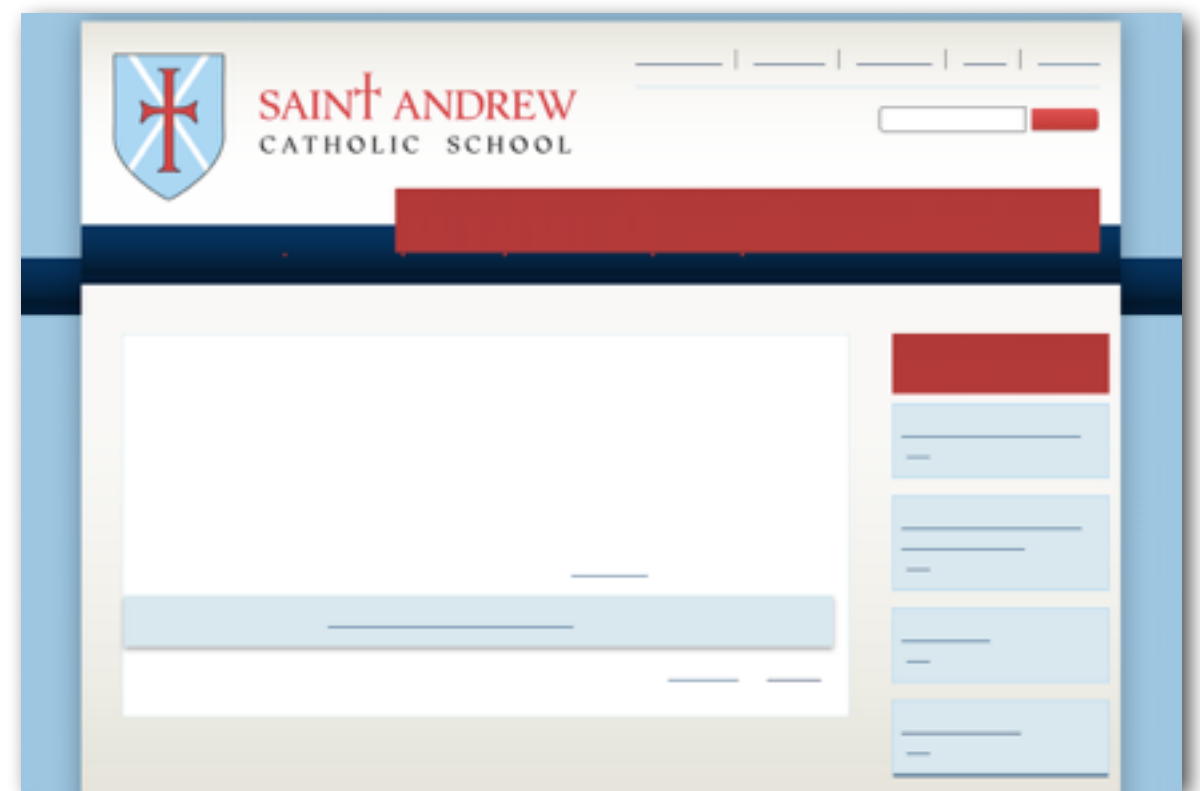
Progressive Performance

```
<!-- 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>

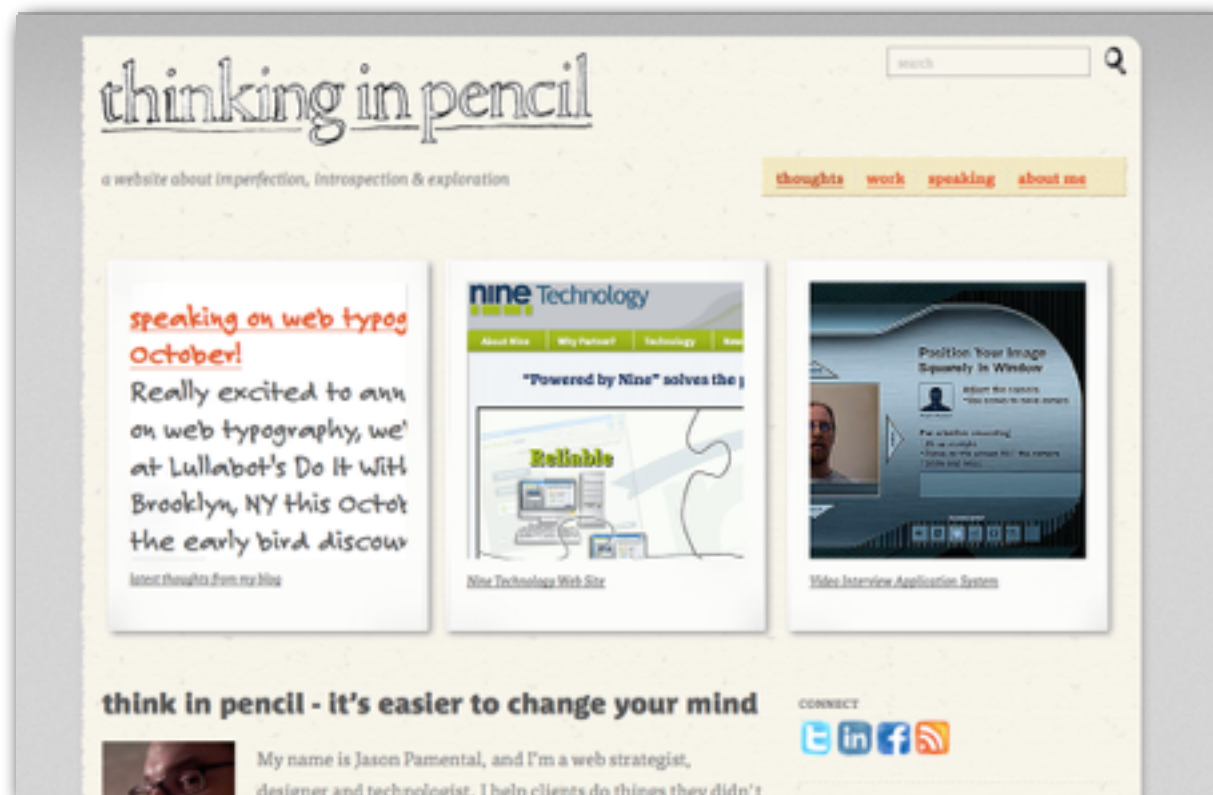
<!-- NEEDED FOR NO JS AVAILABILITY -->
<noscript>
  <!-- Use this in as a fallback to no javascript being available -->
  <link href='http://fonts.googleapis.com/css?family=Roboto+Slab:700|Roboto:400,400italic,700italic,700'
    rel='stylesheet' type='text/css'>
</noscript>
```


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

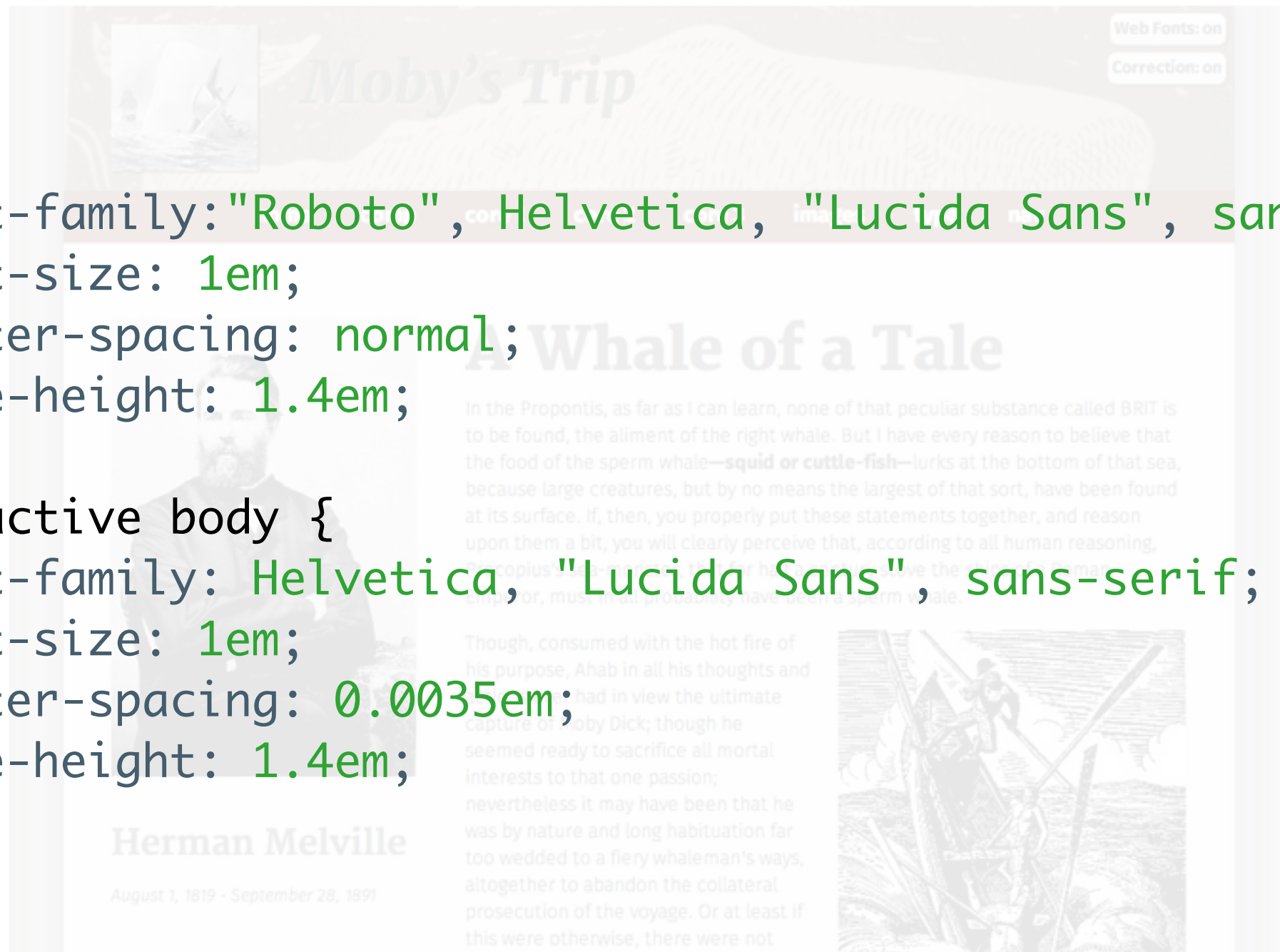
Progressively Enhance



Web fonts loaded

Progressively Enhance

```
body {  
  font-family: "Roboto", Helvetica, "Lucida Sans", sans-serif;  
  font-size: 1em;  
  letter-spacing: normal;  
  line-height: 1.4em;  
}  
.wf-inactive body {  
  font-family: Helvetica, "Lucida Sans", sans-serif;  
  font-size: 1em;  
  letter-spacing: 0.0035em;  
  line-height: 1.4em;  
}
```



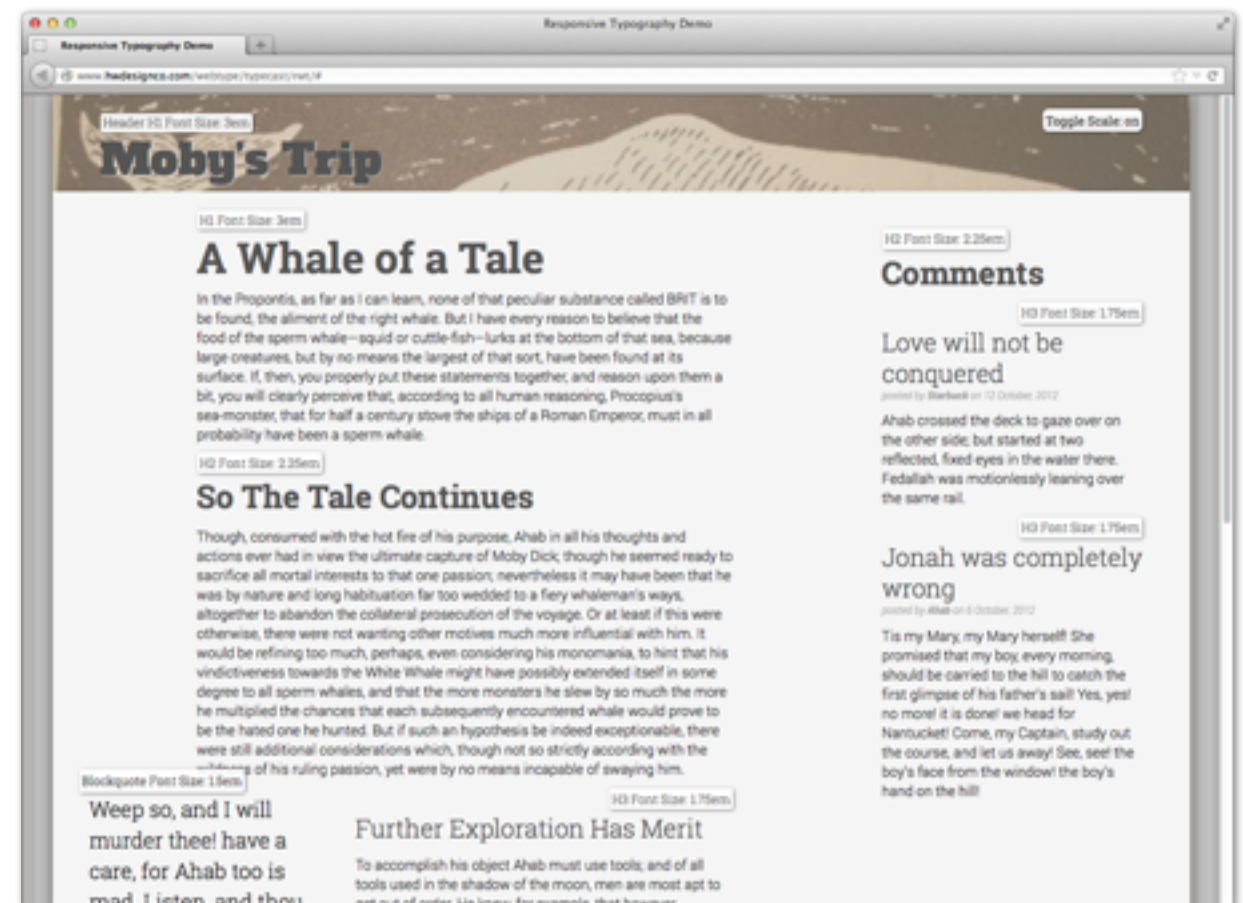
Proportion

Proportion: one size won't do

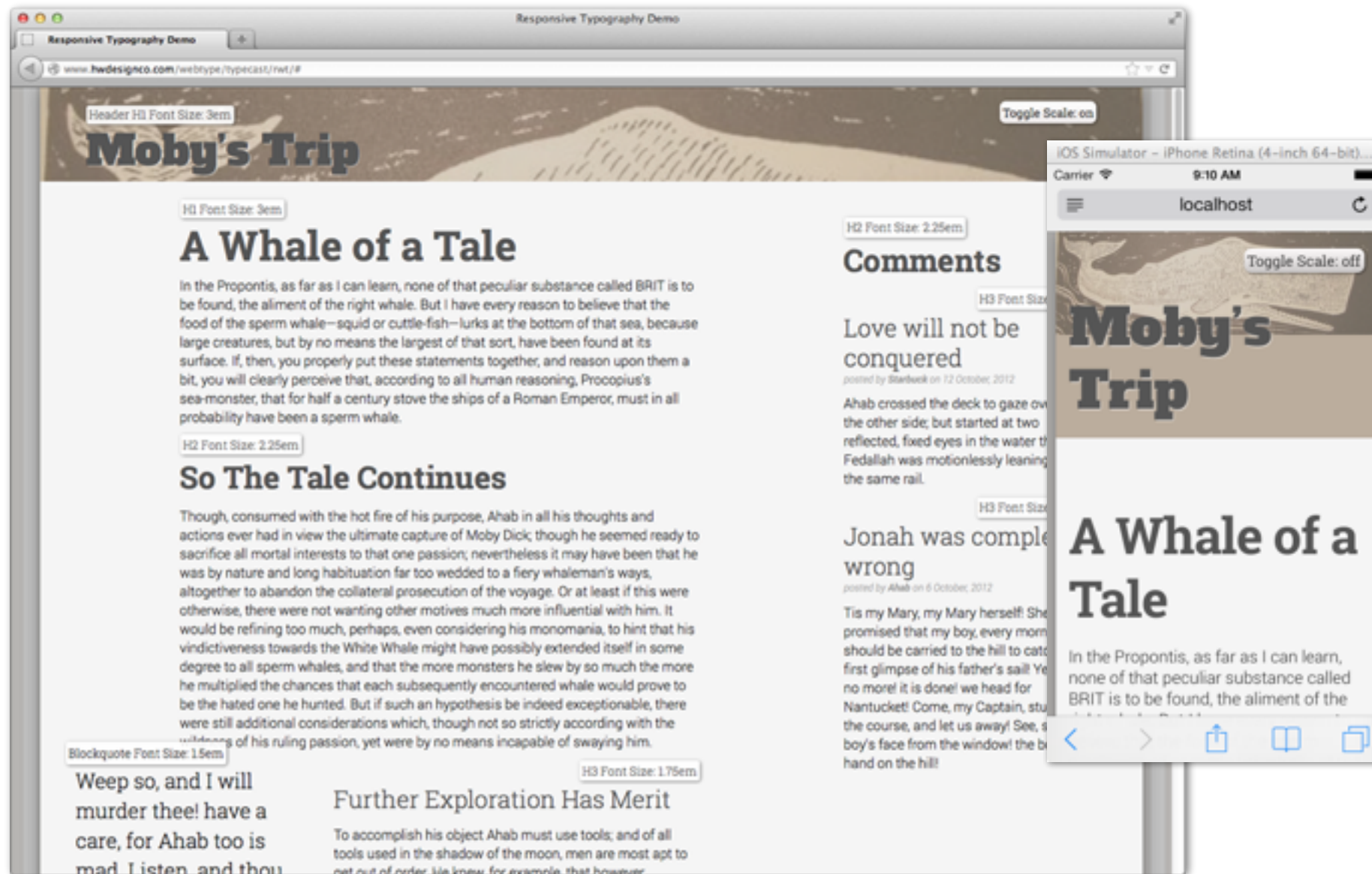
	1	1.25			
DESKTOP	H_1	H_2	H_3	H_4	
	3	1.05	2.25	1.25	1.75
MOBILE	H_1	H_2	H_3	H_4	
	2	1.25	1.625	1.15384615	1.375

Desktop geese & handheld gander

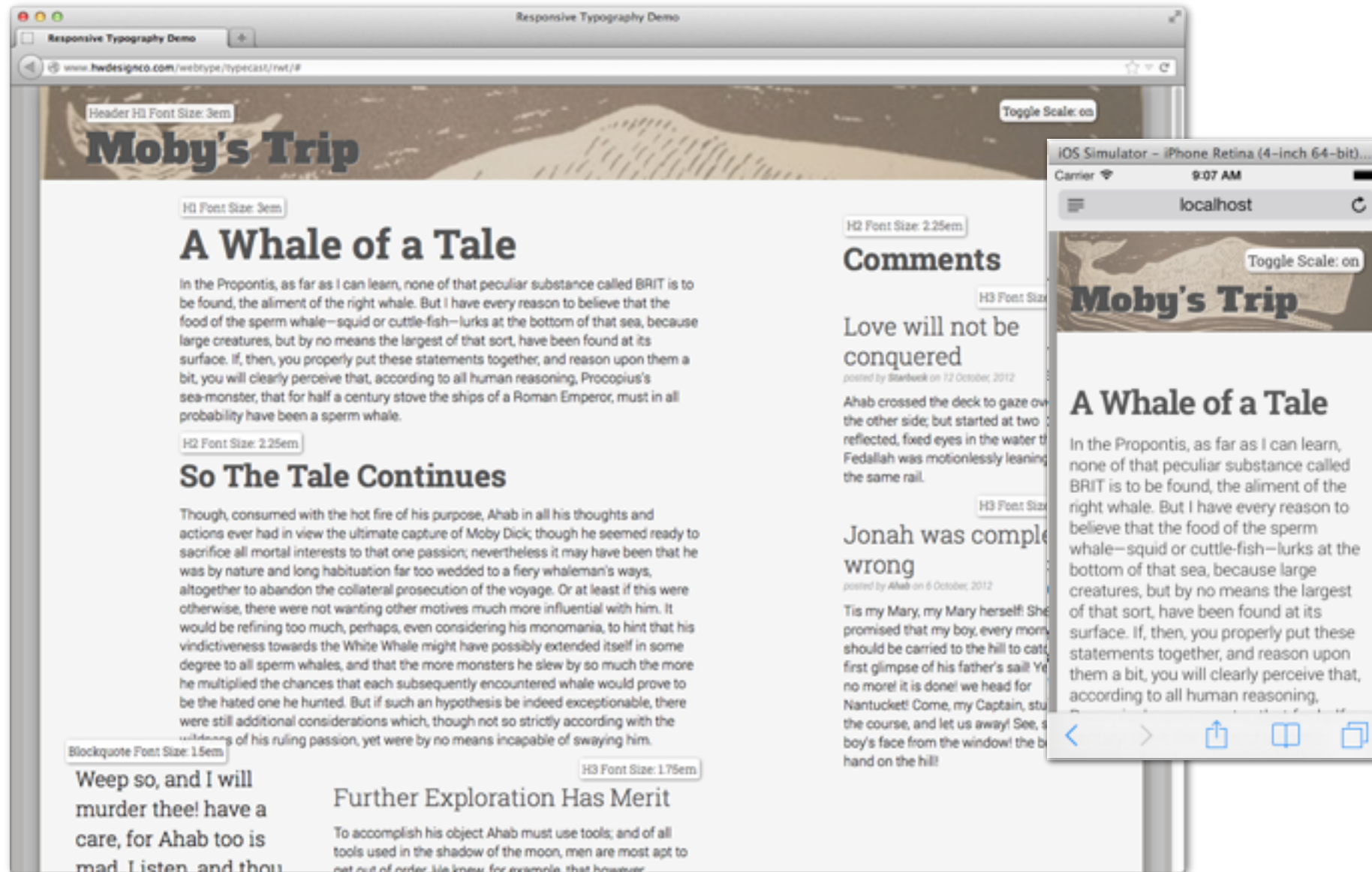
- + Small canvas requires subtle proportions
- + What works in print... works in print
- + Robert Bringhurst matters, but scale must adapt



For example...

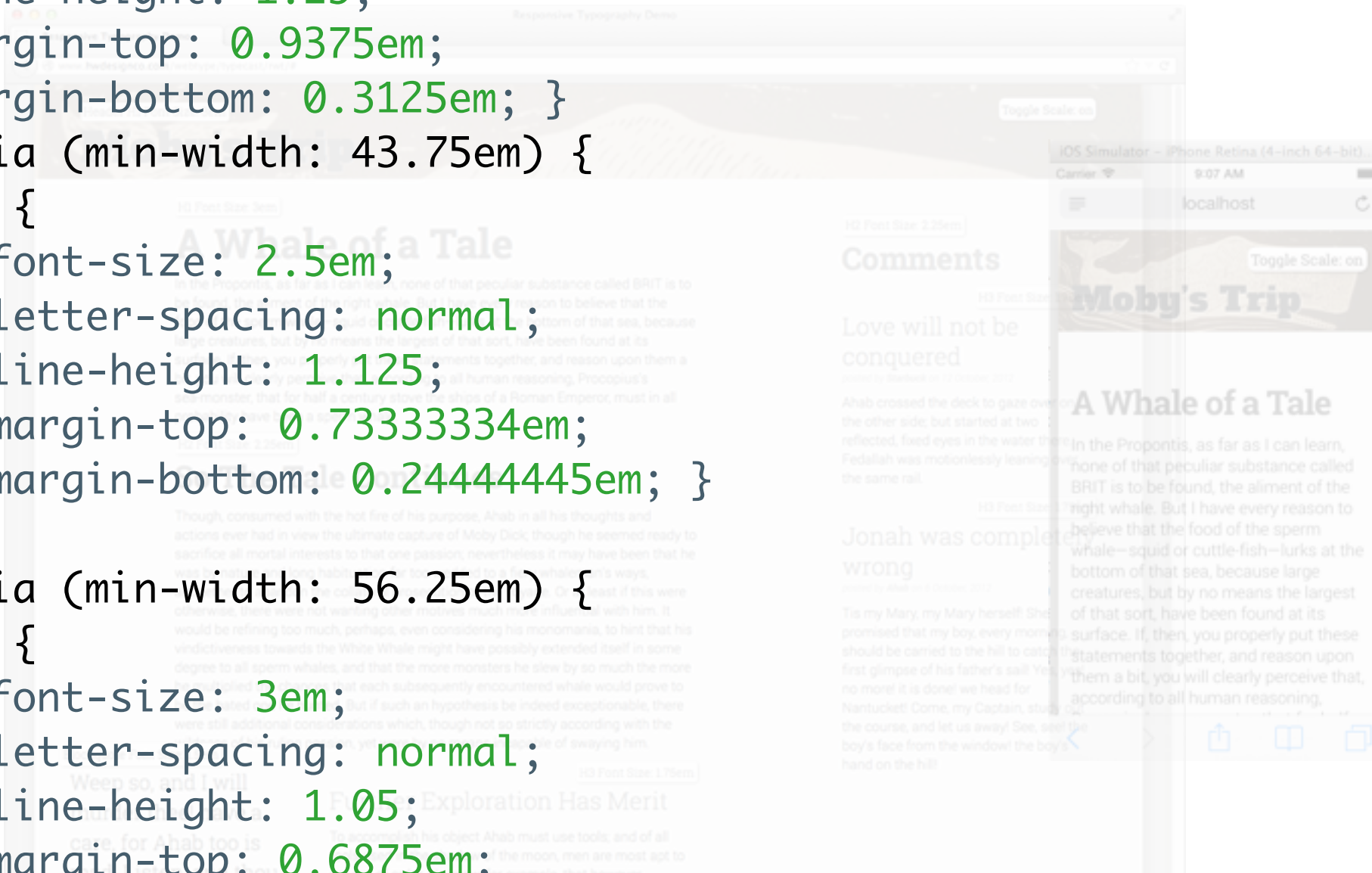


For example...



For example...

```
h1 {  
  font-size: 2em;  
  line-height: 1.25;  
  margin-top: 0.9375em;  
  margin-bottom: 0.3125em; }  
@media (min-width: 43.75em) {  
  h1 {  
    font-size: 2.5em;  
    letter-spacing: normal;  
    line-height: 1.125;  
    margin-top: 0.73333334em;  
    margin-bottom: 0.24444445em; }  
}  
@media (min-width: 56.25em) {  
  h1 {  
    font-size: 3em;  
    letter-spacing: normal;  
    line-height: 1.05;  
    margin-top: 0.6875em;  
    margin-bottom: 0.22916667em; }  
}
```



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

Moby's Trip

TOGGLE OT FEATURES: ON

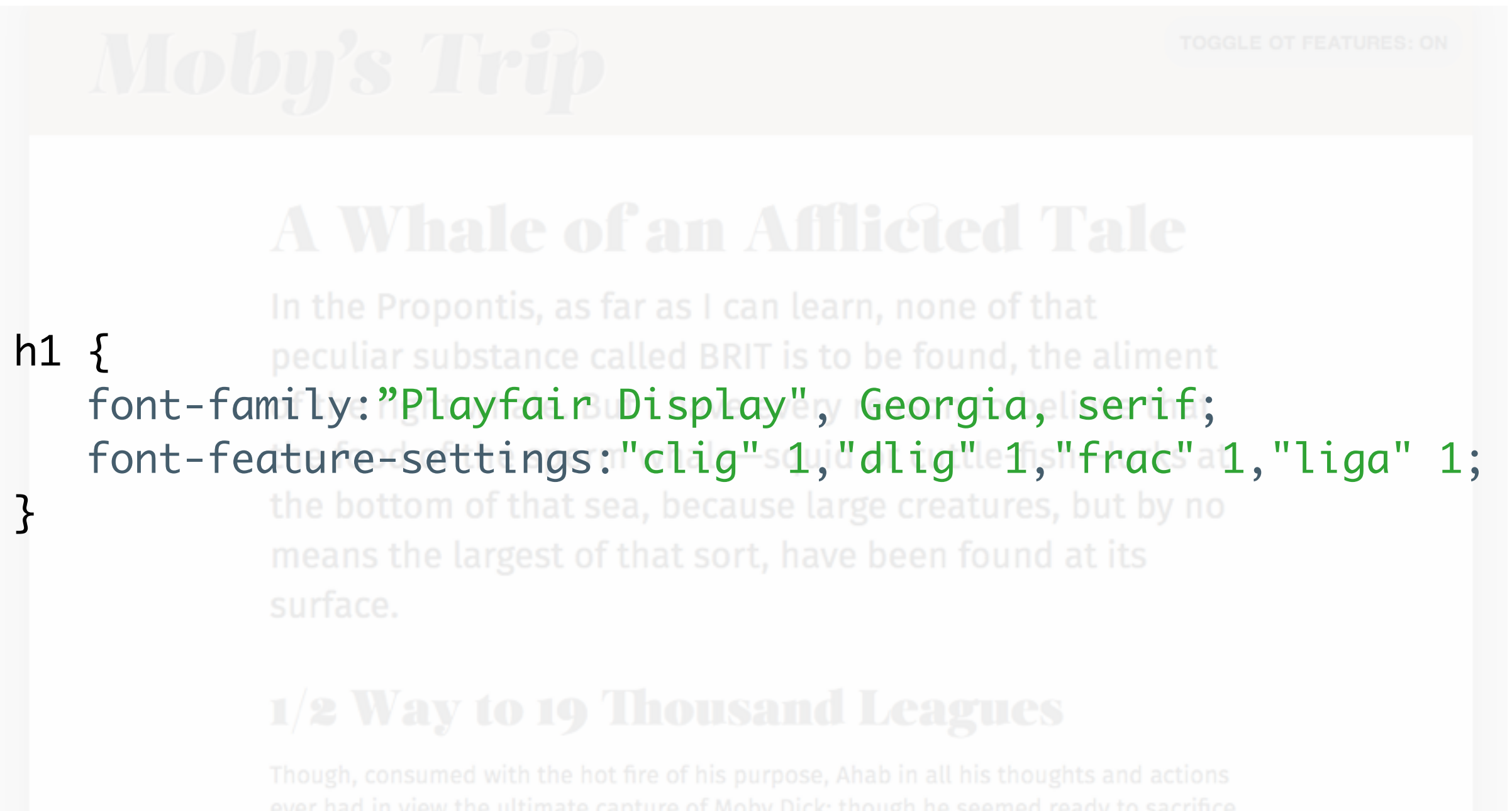
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Polish: Don't Forget Fit & Finish



<http://bit.ly/jpsassotf>

hwdesignco.com | @jpamental | Responsive Typography

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 Forget Fit & Finish

```
#main-content p:first-of-type:first-letter,  
.lt-ie9 #main-content h1 + p:first-letter {  
  font-size: 3em;  
  font-family: "Playfair Display", Georgia, "Times New Roman";  
  font-weight: bold;  
  line-height: 0.9;  
  display: block;  
  float: left;  
  padding-right: 0.15em;  
  padding-top: 0;  
}
```

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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>

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.

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- + Also try Widowtamer for JS drop-in solution:
<http://bit.ly/rt-widotamer>

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<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

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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*)

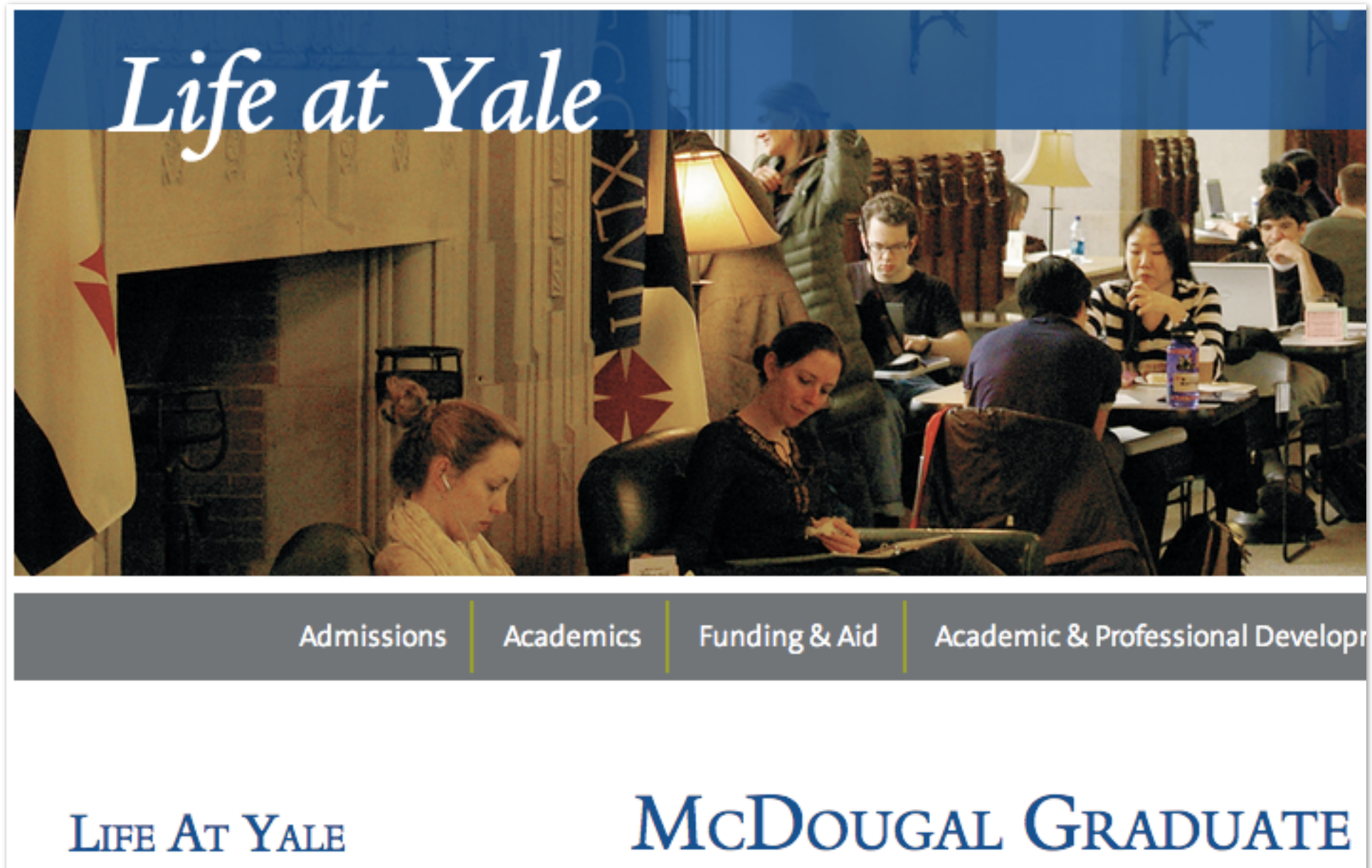
- + **EMs** or **REMs**, but no PX

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

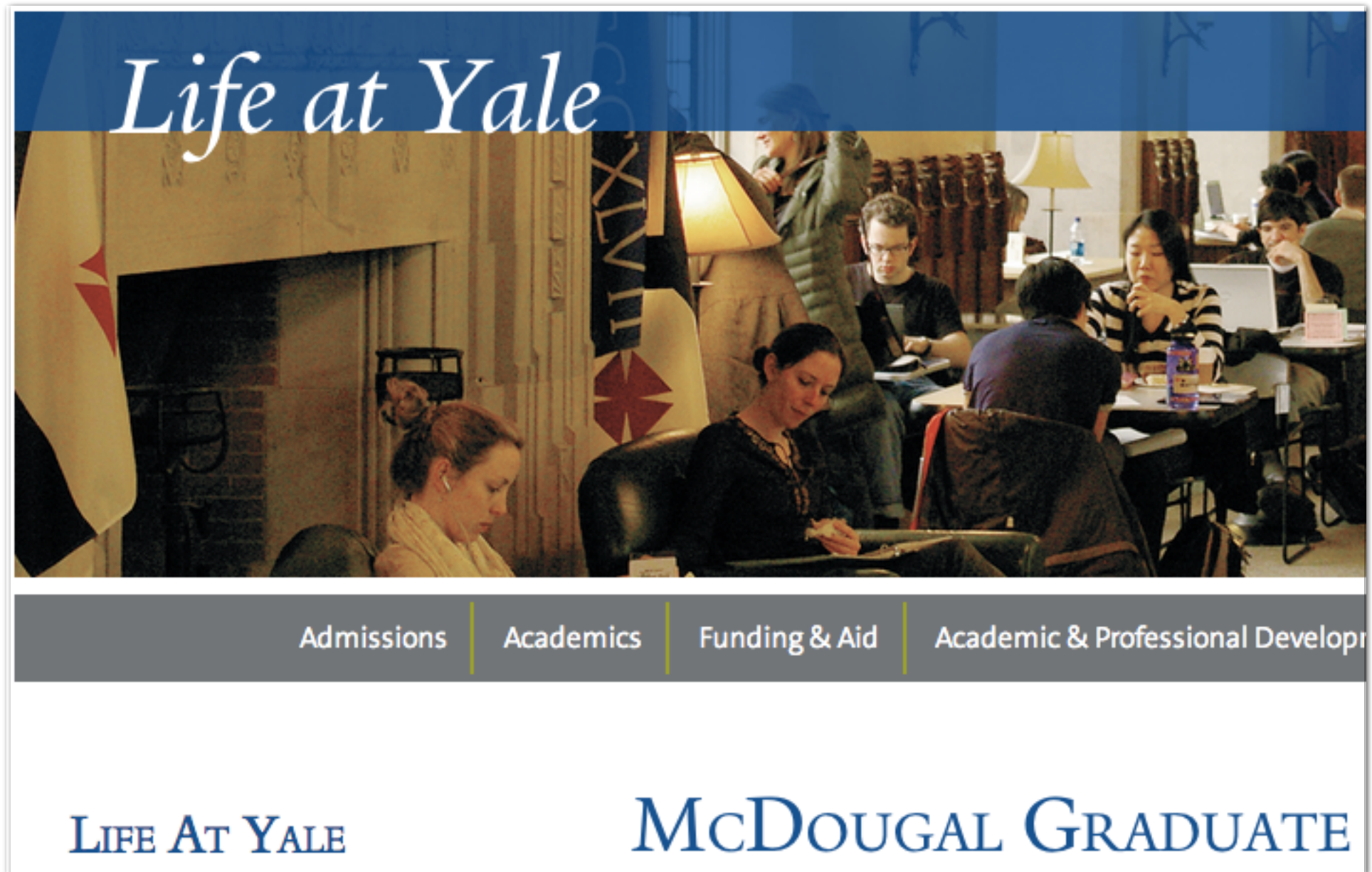
New Tricks

- + Emerging attributes:
font-size-adjust & font-smoothing
- + The future is here; it's just not evenly distributed
- + Try text-rendering engine detection combined
w/font-smoothing adjustments
(<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

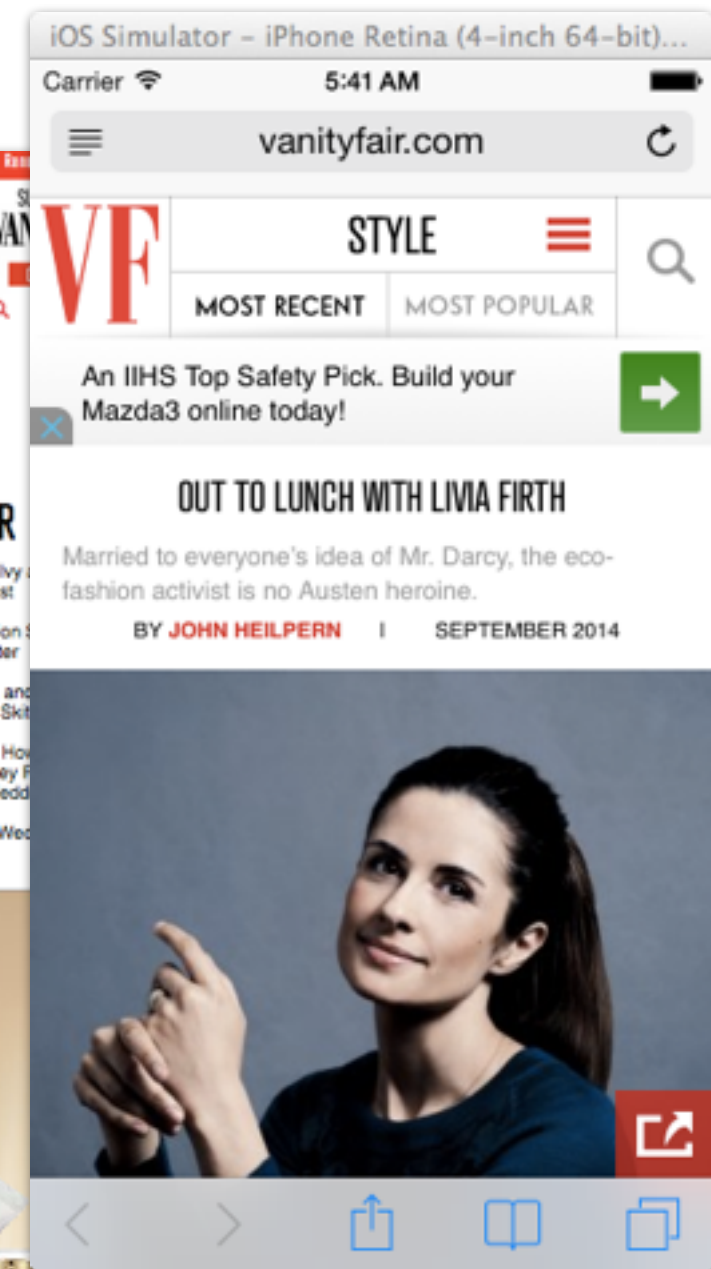
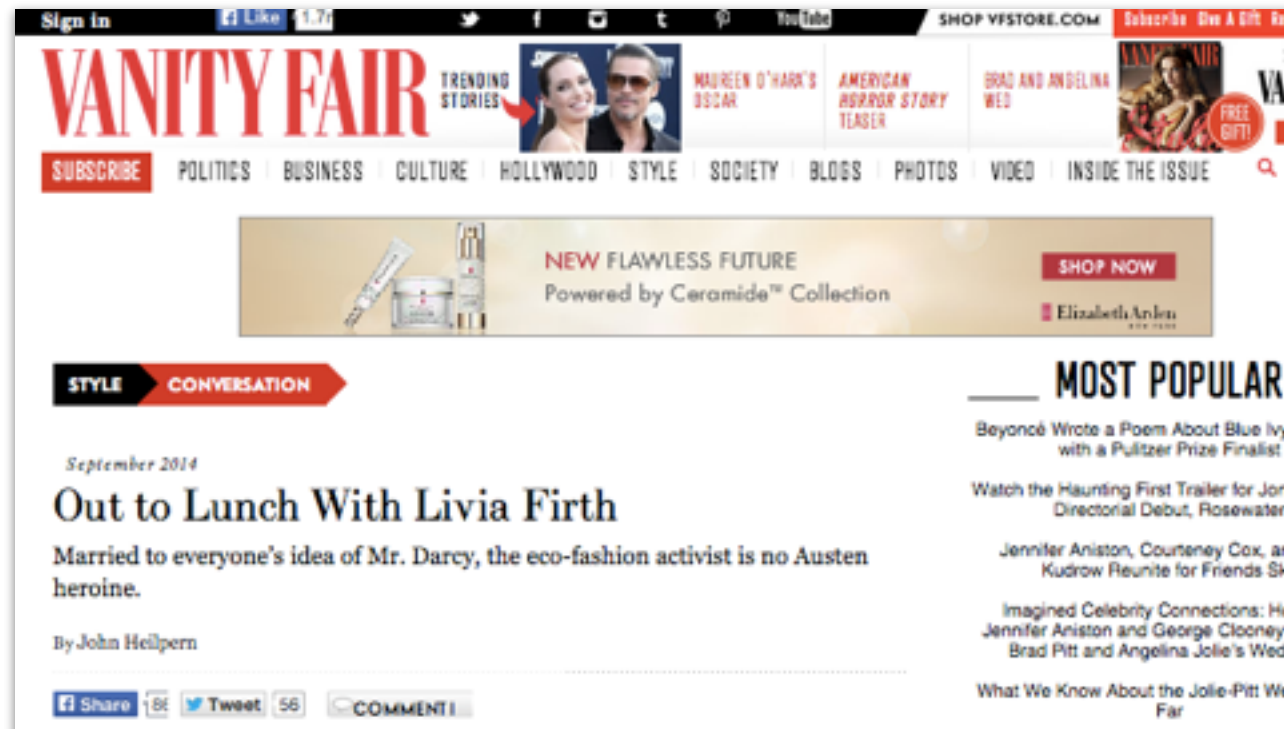
or at least a far better start

Inspiration

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



Frustration



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?

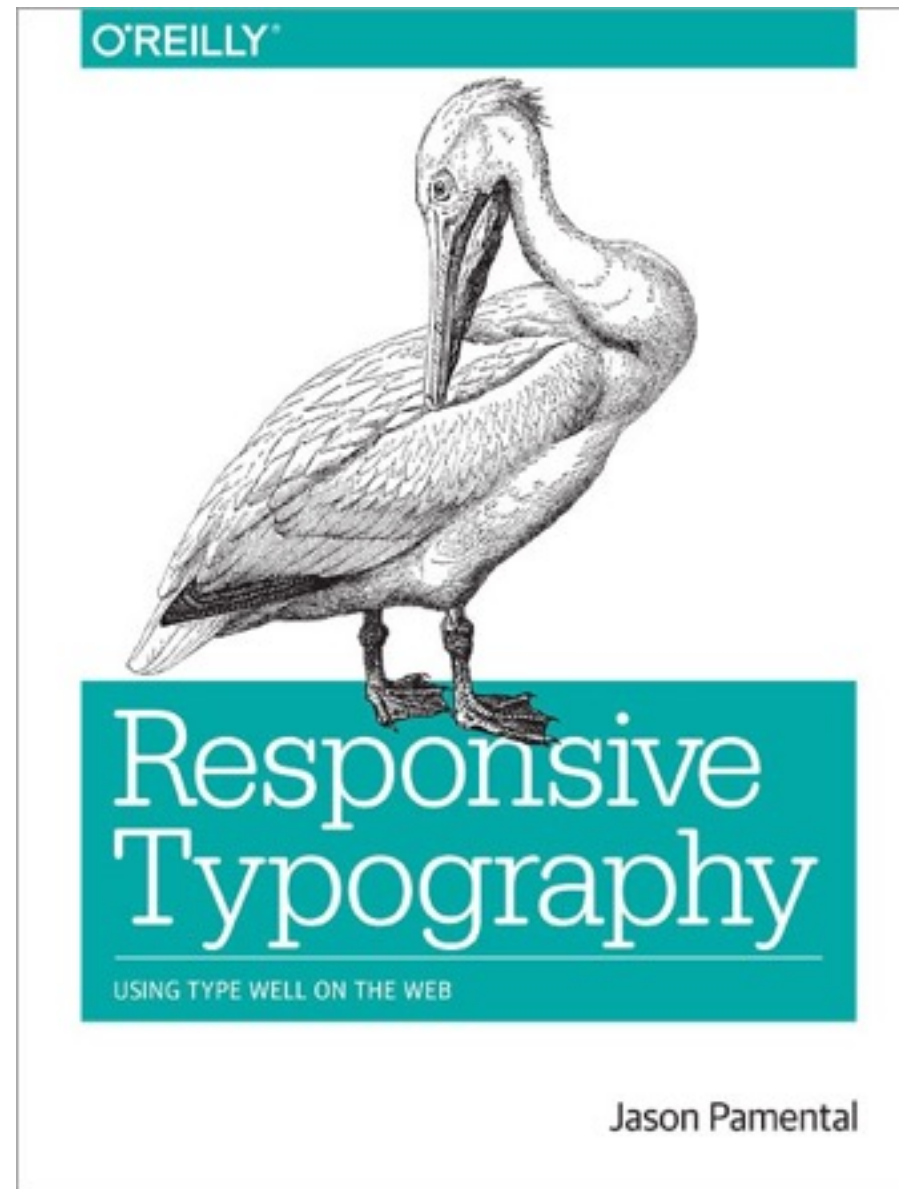
+ Proportion

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

+ Polish

- Great typography is greater than the sum of its parts

Just out!



<http://bit.ly/rwtbook>

Thank You

Jason Pamental (@jpamental)

Slides: <http://bit.ly/jprefreshbos14>

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