### Responsive Typography

Design for Meaning, Not for Screen Size



#### Who Am I?

+ Co-founder of h+W



+ Tinkerer with



+ Built a lot of these



+ Co-parent of





#### What We'll Cover

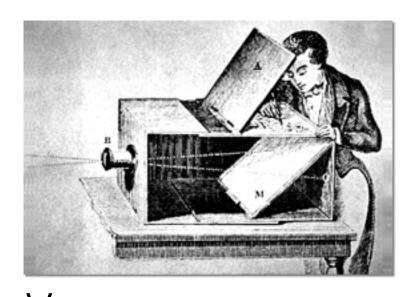
- + Lies & deceptions about art & science
- + Understanding the value of hats
- + What is Responsive Typography
- + Practicing the Four P's



#### **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

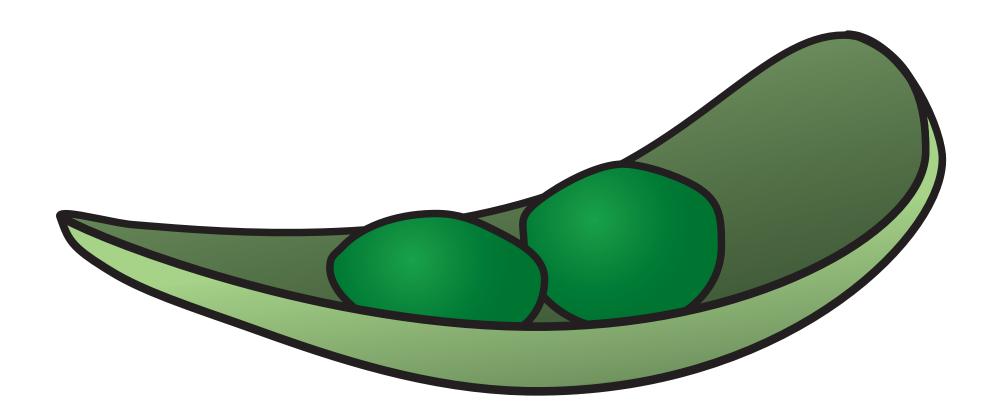


#### Art+Science



### 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



+ Words have meaning, but letters have emotion



+ Words have meaning, but letters have emotion

# love you



+ Words have meaning, but letters have emotion

## I love you



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



+ 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.



+ 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.



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



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- + Readable means you might actually want to

#### A tale of a curious affliction



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

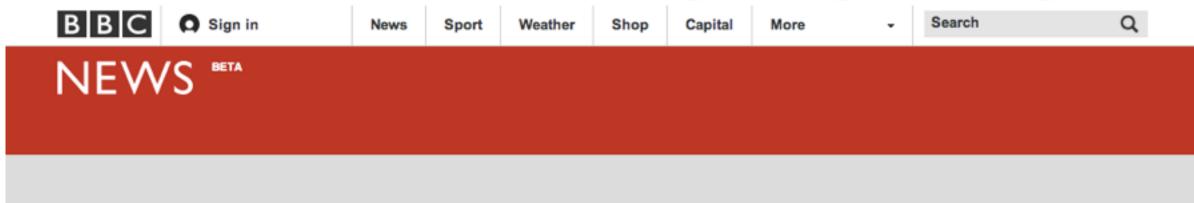
#### A tale of a curious affliction



#### A Design Dilemma: What We Don't Know

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

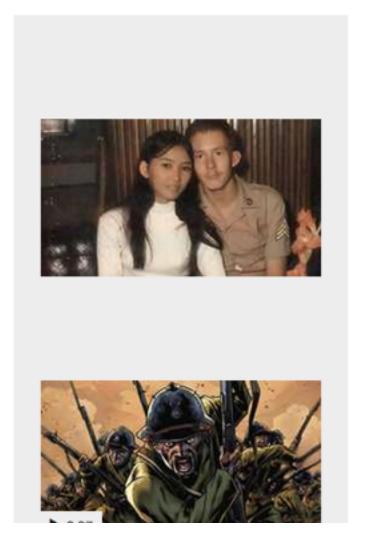






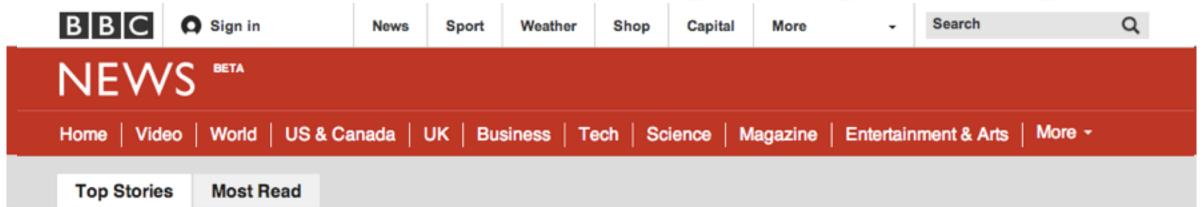








a design company



#### Military observer freed in Ukraine



One European military observer has been freed in Sloviansk where pro-Russian separatists are holding the rest of the team, detained on Friday.

O 29 minutes ago | Europe



#### Vatican declares two popes saints

Pope Francis declares Popes John Paul II and John XXIII saints, praising them as "men of courage" in front of a crowd of hundreds of thousands.

© 9 hours ago | Europe



Britain is now 'post-Christian'

#### Features & Analysis



Searching for my son
A US veteran returns to find the
unborn child he left in Vietnam





President Obama: ""We will be expanding our exercises and training with allies to increase the readiness of our forces"

President Barack Obama has announced plans for a \$1bn (£600m) fund to increase US military deployments to Europe, during a visit to Poland.

Mr Obama, who will meet Nato leaders amid concerns over the Ukraine crisis, said the security of America's European allies was "sacrosanct".

In April, 150 US soldiers were sent to Poland for military exercises amid growing tensions with Russia.





**SEPTEMBER 16, 2014** 

NEWS DESK

A REFERENDUM ON THE UNION JACK

BY VIRGINIA CANNON

**SEPTEMBER 16, 2014** 

DAILY COMMENT

THE DISAPPEARING "UNDUE BURDEN" STANDARD FOR ABORTION RIGHTS

BY JEFFREY TOOBIN



#### 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** 

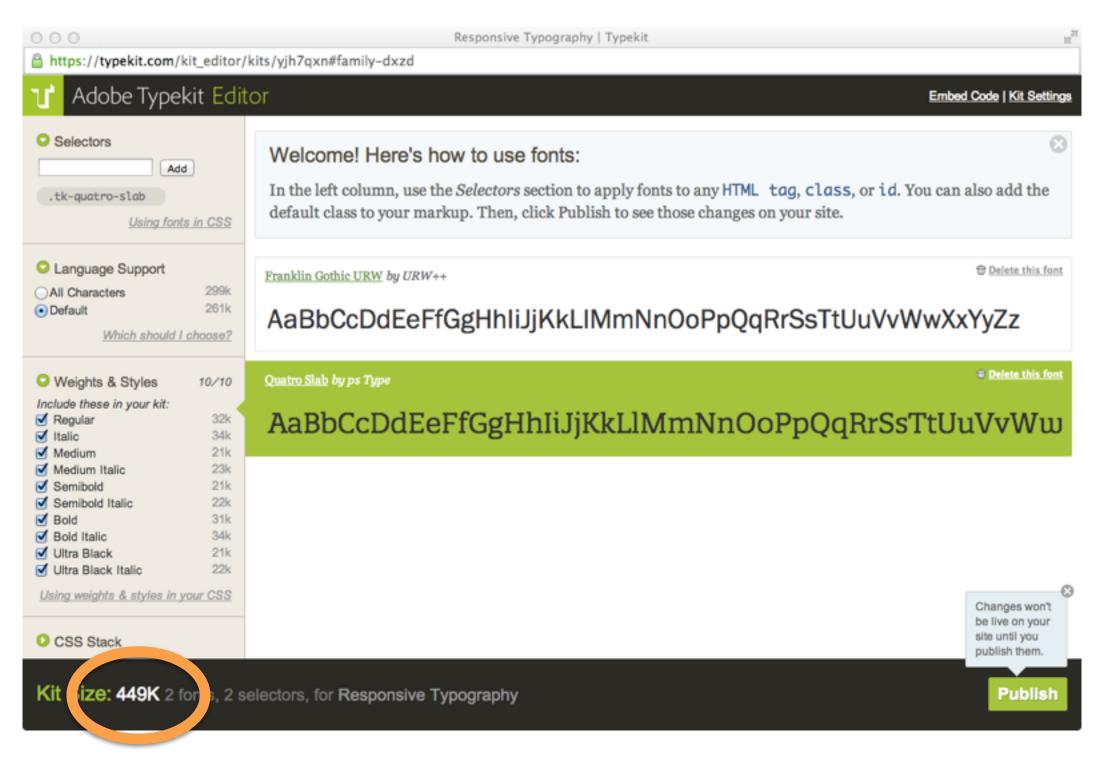
this is a typeface

this is a font

+ Each font has a performance cost, so budget wisely

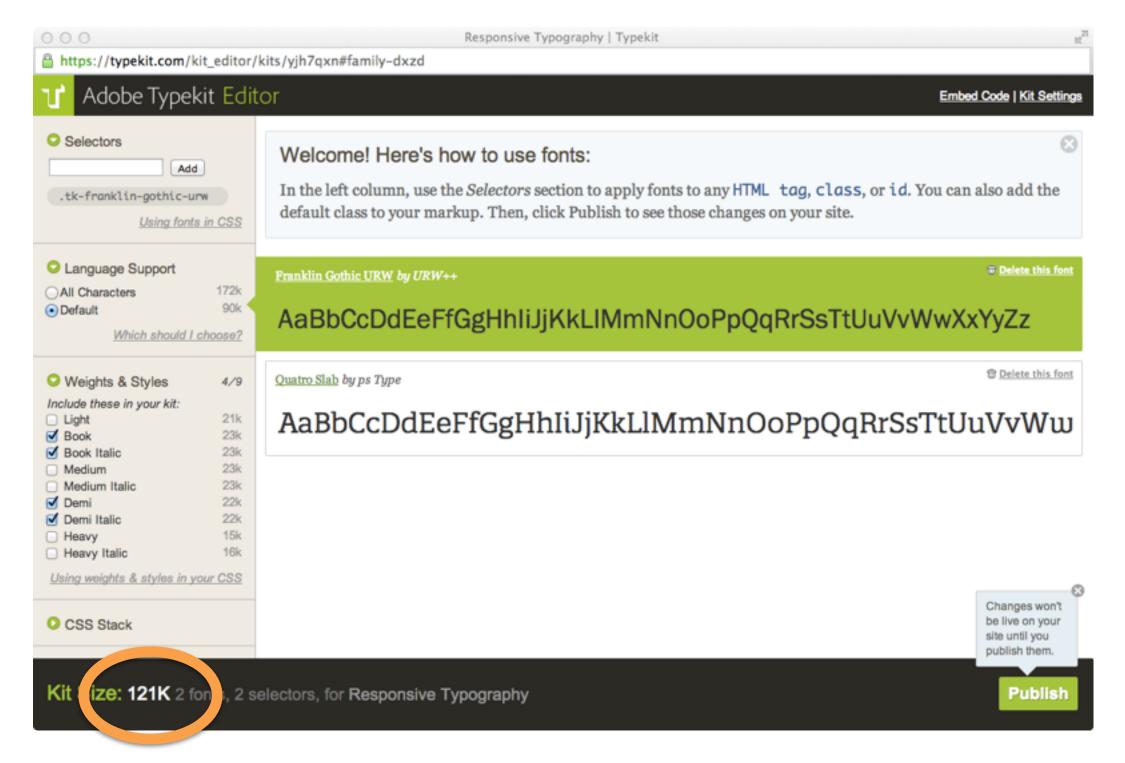


#### **Performance Matters**





#### **Performance Matters**





#### 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'</pre>
    rel='stylesheet' type='text/css'>
</noscript>
```

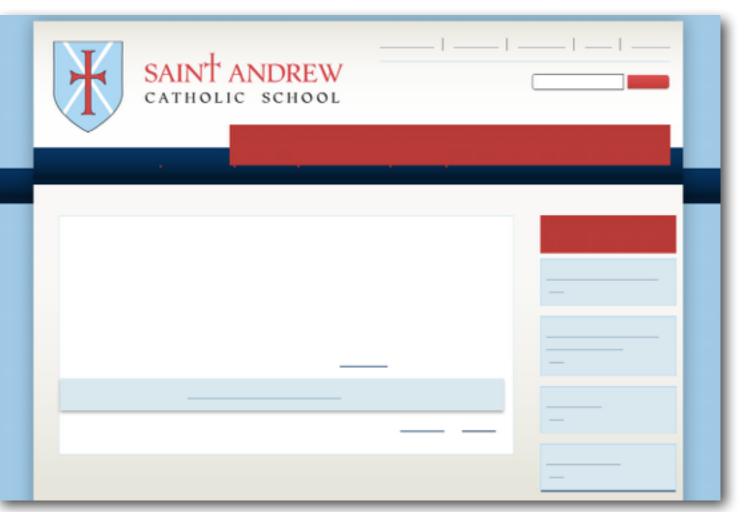


## Progressive Enhancement



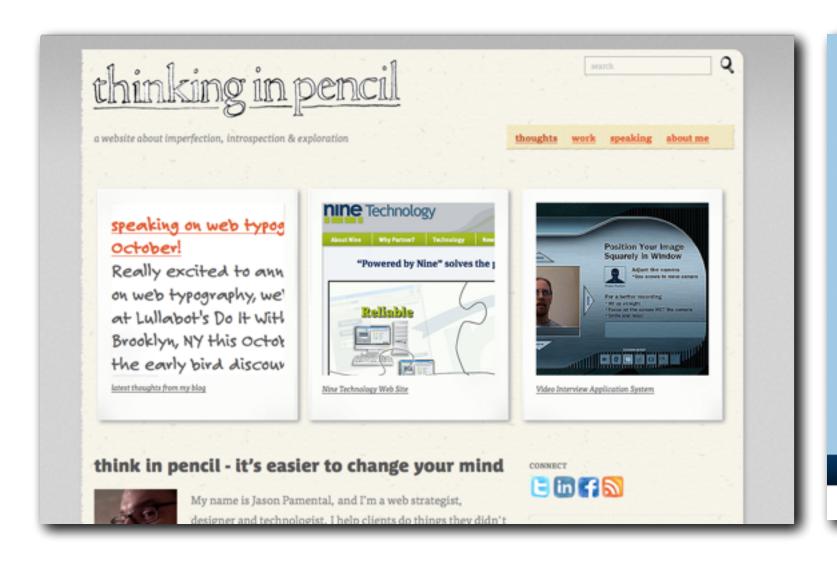
#### FOUT is OUR fault







#### 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





# Progressively Enhance





No web fonts, corrected

# Progressively Enhance





Web fonts loaded

# Backwards Compatible, Future Friendly

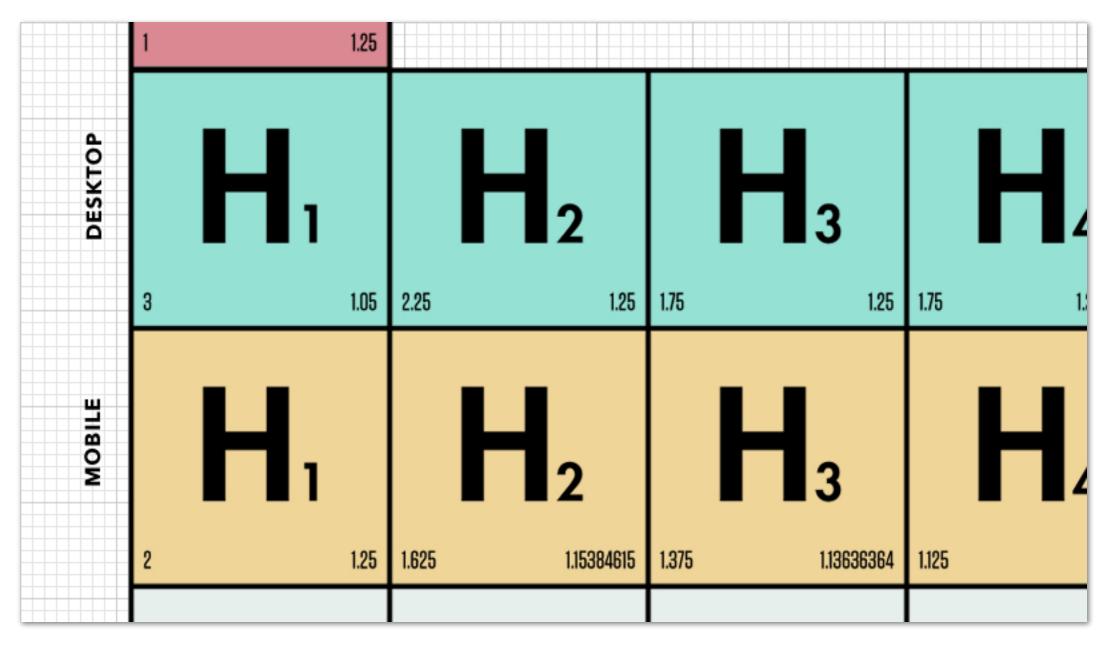
```
<!-- NEEDED FOR NO JS AVAILABILITY -->
<noscript>
    <!-- Use this in as a fallback to no javascript being available -->
    <link href='http://fonts.googleapis.com/css?family=Roboto+Slab:700|Roboto:400,400italic,700italic,700'</pre>
    rel='stylesheet' type='text/css'>
</noscript>
```



# Proportion



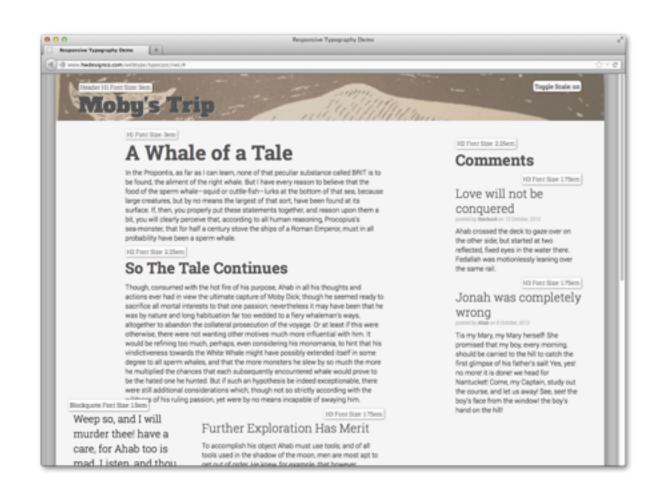
# Proportion: one size won't do





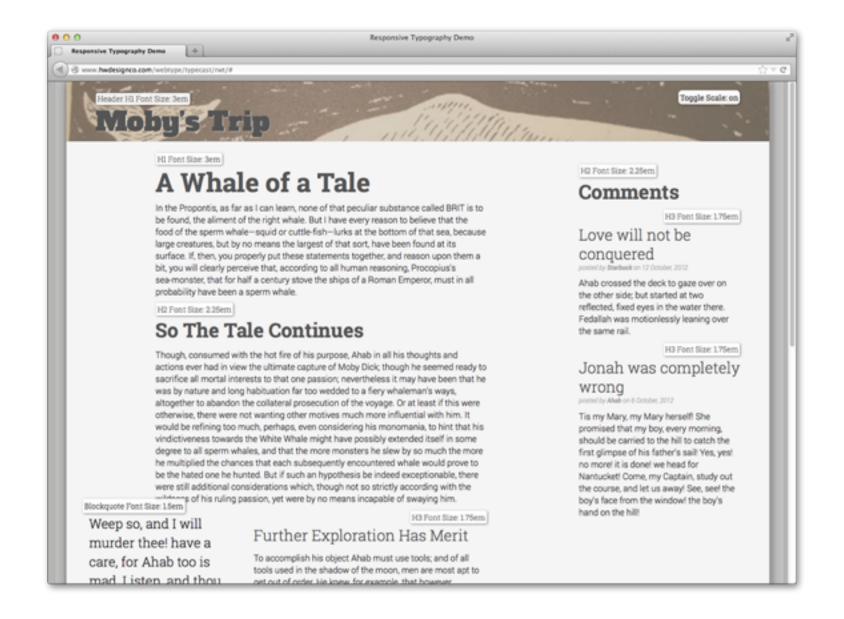
# Desktop geese & handheld gander

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





# For example...

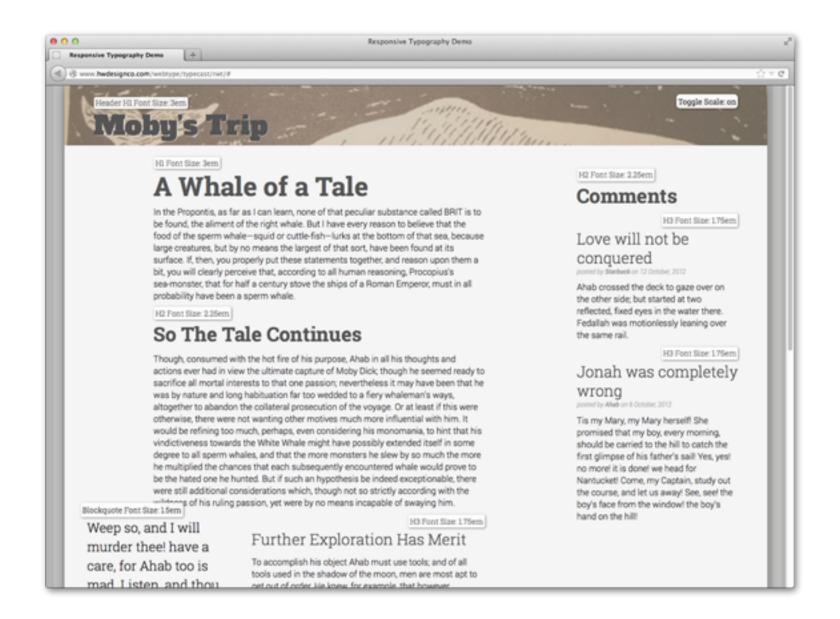


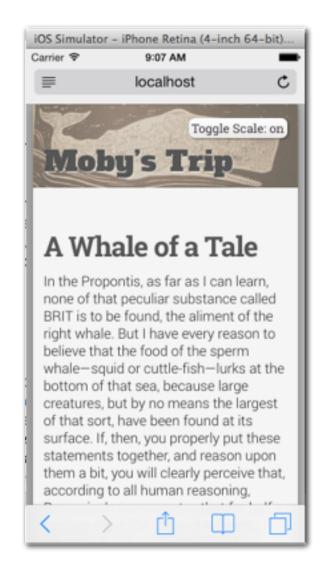




http://bit.ly/jprwt

# For example...







http://bit.ly/jprwt

## A More Modern Scale

	Print	Desktop (large)	Desktop	Tablet (large)	Tablet (small)	Phone
Body						
<ul><li>Font size:</li><li>Line height:</li><li>Line length:</li></ul>	• 12pt • 1.25 • 60-75	<ul><li>16px (1em)</li><li>1.375</li><li>60-75</li></ul>	<ul><li>16px (1em)</li><li>1.375</li><li>60-75</li></ul>	• 16px (1em) • 1.375 • 60-75	• 16px (1em) • 1.25 • 60-75	<ul><li>16px (1em)</li><li>1.25</li><li>35-40</li></ul>
H1						
Font size:     Line height:	<ul><li>36pt (3em)</li><li>1.25</li></ul>	<ul><li>48px (3em)</li><li>1.05</li></ul>	<ul><li>48px (3em)</li><li>1.05</li></ul>	• 40px (2.5em) • 1.125	• 32px (2em) • 1.25	• 32px (2em) • 1.25
H2						
Font size:     Line height:	<ul><li>24pt (2em)</li><li>1.25</li></ul>	<ul><li>36px (2.25em)</li><li>1.25</li></ul>	<ul><li>36px (2.25em)</li><li>1.25</li></ul>	• 32px (2em) • 1.25	• 26px (1.625em) • 1.15384615	• 26px (1.625em) • 1.15384615
НЗ						
Font size:     Line height:	• 18pt (1.5em) • 1.25	<ul><li>28px (1.75em)</li><li>1.25</li></ul>	• 28px (1.75em) • 1.25	• 24px (1.5em) • 1.25	• 22px (1.375em) • 1.13636364	<ul><li>22px (1.375em)</li><li>1.13636364</li></ul>
H4						
Font size:     Line height:	<ul> <li>14pt (1.16666667em)</li> <li>1.25</li> </ul>	<ul><li>18px (1.125em)</li><li>1.22222222</li></ul>	• 18px (1.125em) • 1.2222222	• 18px (1.125em) • 1.22222222	• 18px (1.125em) • 1.1111111	• 18px (1.125em) • 1.1111111
Blockquote						
Font size:     Line height:	<ul><li>24pt (2em)</li><li>1.45833333</li></ul>	<ul><li>24px (1.5em)</li><li>1.45833333</li></ul>	<ul><li>24px (1.5em)</li><li>1.45833333</li></ul>	• 24px (1.5em) • 1.45833333	• 20px (1.25em) • 1.25	• 20px (1.25em) • 1.25
				L		



# 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

ivilization 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.<sup>1</sup>

"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."

- Herodotus<sup>2</sup>

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been taken away." — Herodotus<sup>2</sup>



# Polish: Don't Leave Orphans Behind

- + Typogrify FTW:

  <a href="http://bit.ly/rt-tpgrfy">http://bit.ly/rt-tpgrfy</a>

  <a href="http://bit.ly/rt-tpgrfy-ee">http://bit.ly/rt-tpgrfy-ee</a>

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

#### a little look back & an exciting view ahead

posted by Jason Pamental on December 31st, 2013

Well - this is the last day of the first year of our new firm, and it's fitting we take a moment to reflect on our progress, acknowledge the support of our friends and clients, and look forward to some really exciting projects heading into the New Year. We couldn't have gotten off to such an amazing start without the support of many friends, colleagues and clients — old and new — and for that, we thank you. Your faith in us and enthusiastic support mean the world.

#### **Latest Posts**

Responsive Typography is out!

(05/16/2014)

a little look back & an exciting view ahead (12/31/2013)

This is our craft. This is our art.



## 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 (<a href="http://typerendering.com/">http://typerendering.com/</a> 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





# Inspiration

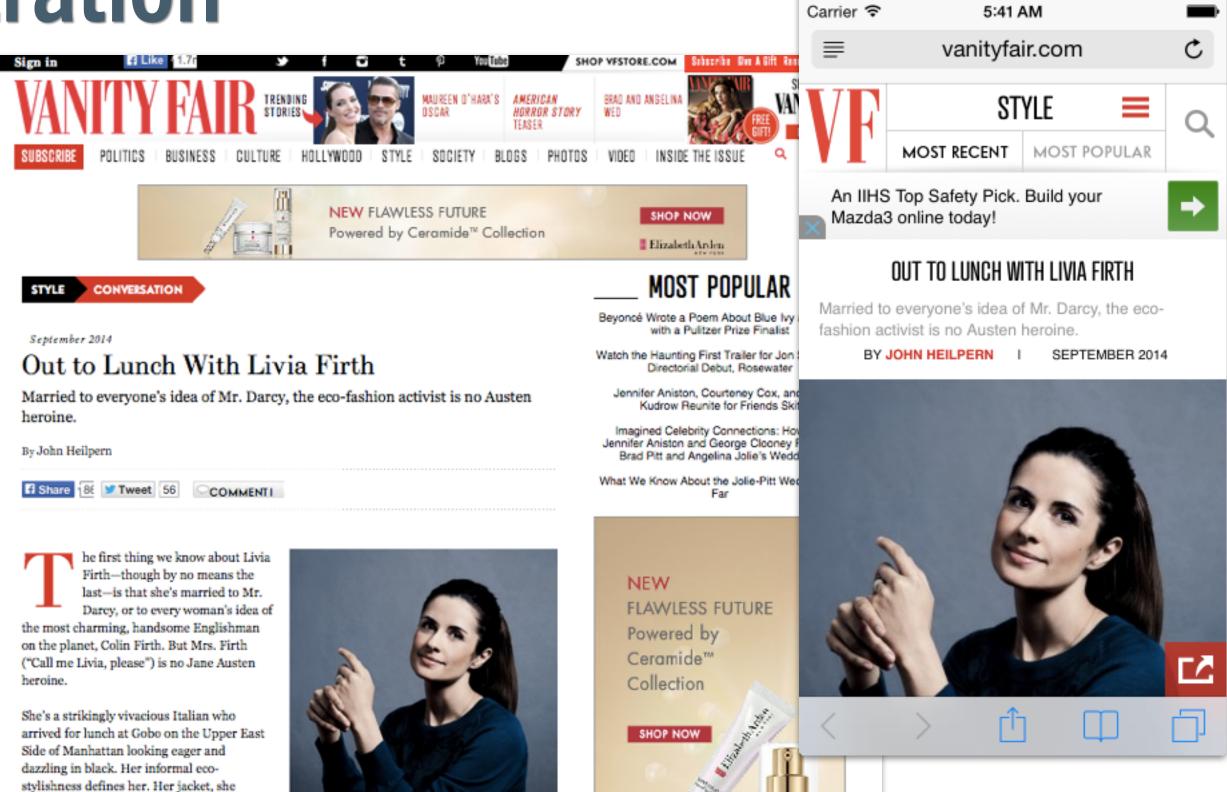
- + Oversize 2-level header
- + Stylized subhead
- + Byline
- + Large initial cap
- + Inset photo
- + Pull-quote



## Frustration

explained in her Anglo-Italian accent, was

from a French brand, Kami Organic, and was





iOS Simulator - iPhone Retina (4-inch 64-bit)...

#### 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

he 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

her trousers, from the London shop Joseph, weren't "eco" or "ethical," however, but several

## Realization

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



# Out to Lunch With —

By JOHN HEILPERN

he 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;

Why would a liberated woman like Livia Firth, I wondered, take her husband's surname? "My maiden name is Giuggioti," she said, "but it's impossible for any English person to say or write! Nobody can spell it. So you know what I decided? It's just Firth. Five letters. Very easy. But in Italy we are Colin and Livia Giuggioli: Because you try telling an Italian how to say Firth! Fearth. You have to say Fearth!"

The Firths live in London, and they have two children. She's nine years younger than he, and they met in Cartagena, Colombia, where he was filming the TV mini-series Nostromo and she was its production coordinator. "I was engaged at the time, and we met on the set, which was in a church. We shook hands, and here we are today, 19 years later."

"What happened to your poor old fiance?"

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 familyrun 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.



"The poor old flancé is now married, with two girls. We're still friends. His wife's Australian. But, you know, it's funny. When I met Colin he wasn't yet Mr. Darcy, and we started the courtship. And then Pride and Prejudice came out, and the response from my family and all the Italians was 'Do you really consider this guy sexy?' "

66All clothes tell a story.

She laughs easily (and it's catching). "Italians can't deal with English restraint. They think the reserve of an Englishman is constipated."

"He won everyone over, though?"



## Realization

Out to Lunch With September 2014 MARRIED TO EVERYONE'S IDEA OF MR. DARCY, THE ECO-FASHION ACTIVIST IS NO AUSTEN HEROENE.

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lings. She made a nor link ben and her committed role as an o activist. "We're trying nowad healthy, avoid pesticides, cut fi groon," she said. "Why not care also clothes we wear in the same waythey were made, and what they red Buzzwoods such as "othical fair

eco," and "green" are weighed diverthe costly baggage of sanctimony fashion, after all, is means to be fa-But the impicus Firth isn't a storon cal eco-warrior. Scenetimes described "the Queen of the Green Carpet," th the force behind given fashion on the adcarpet. Meryl Streep is but one of the A-listers (and Torn Ford one of the designers) who have supported eco-frands

high fishion on the ballowed carpet day ing awards season—thereby helping turn "Who are you wearing" into "What are you wearing" At the Paris premiere of The King's Speech

starring her husband as the King of England. Loss appeared on his arm wearing a discarded methornes set of his recycled as a punchwork doess. It's all a deceptively upserious way to convert powerful countriers to the cause, the replained, and make the profile of sustainable fashion.

But she's deadly earnest about the crussding cause and lot topic in fashion that was provoked by the 2013 catastrophe in Rangindesh when the eight-story Rana Plaza gorment factory of lapsed and killed more than 1300 people—predominantly women.

Four years before the tragedy. Firth, an Online global archanals's had visited the garment weekers in Barigladesh and saw for herself the persons working conditions. She reminds us that there are at estimated four million garmers workers in Bangladesh along and the factories they soil at supply the West with our "feet feshion" - the atkenhole circles and knockoffs we buy in Main Street expr-sore-The system is no longer acceptable since Rama Plaza," the said.

The Third World factories are basically using since labor." If so, how is the system to be changed? "How do you set as do coharge she replied "Well I'm patient. Rome wasn't built in a dip. (She was been in Reene.) But there is at least a new awareness of

what's at stake. See simpled out the pioneering example of François Outcy at all.

Goods in a vegetarian restaurant, but

Lista Firth inst a vegetarian. She likes the

TELLA STORY:

Stella McCartney's, who has suvested more inclined in creating ecco-friendly branch.

And the elephane in the recent-the form Henri Pansuk, C.E.O. of the lawry congiomerate Kering (Gueci, Bottega Veneta, Sella McCartney), who has invoked many

And the elephant in the room-the list fishion empires? "All clothes tell a story." and the datations, leady Livin Firth.

PROPOSTATE OF JULIAN AROAD

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"The poor old furnce is now married, with two girls. We're still

Irrends. His wife's Australian. But, you know, it's family. When I met

Colin he wasn't yet Mr. Durey, and we started the courtelin. And

then Poile and Prepality came out, and the response from my fars-

by and all the Baltars was 'Do you work consider this gay sent?"

English restrains. They think the reserve of an Englishman is con-

She laught casely (and it's catching). "Rathers con't deal with

"What happened to your poor old funce?"

"He won everyone over, though?"

"He did, because Colin isn't like Mr.

a design company

# 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



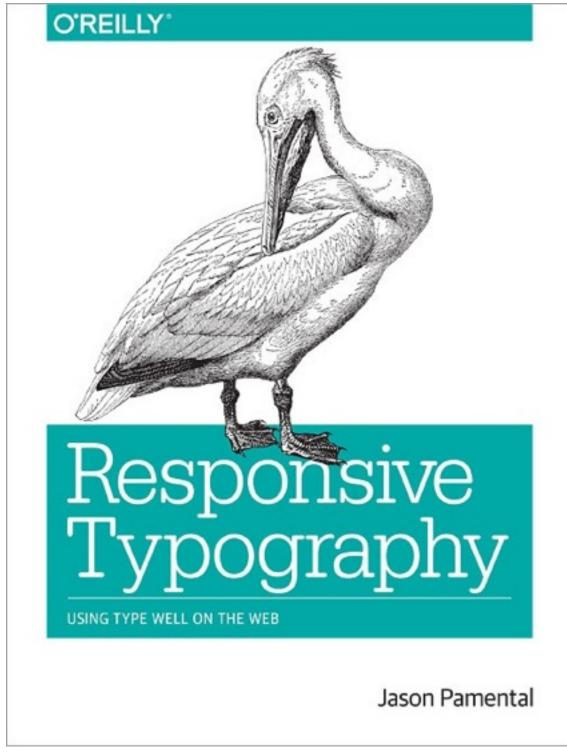
Great typography is greater than the sum of its parts

# "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: <a href="http://bit.ly/jpwebu14">http://bit.ly/jpwebu14</a>

Code: <a href="http://bit.ly/rtwcode">http://bit.ly/rtwcode</a>

