Responsive Typography

Design for Meaning, Not for Screen Size



What We'll Cover

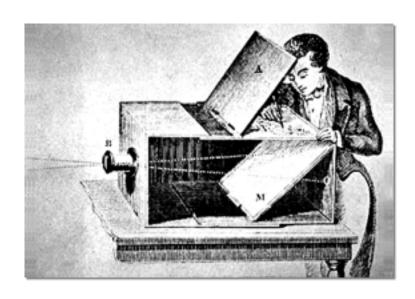
- + Lies & deceptions about art & science
- + Understanding the value of hats
- + What is Responsive Typography
- + Practicing the Four P's



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

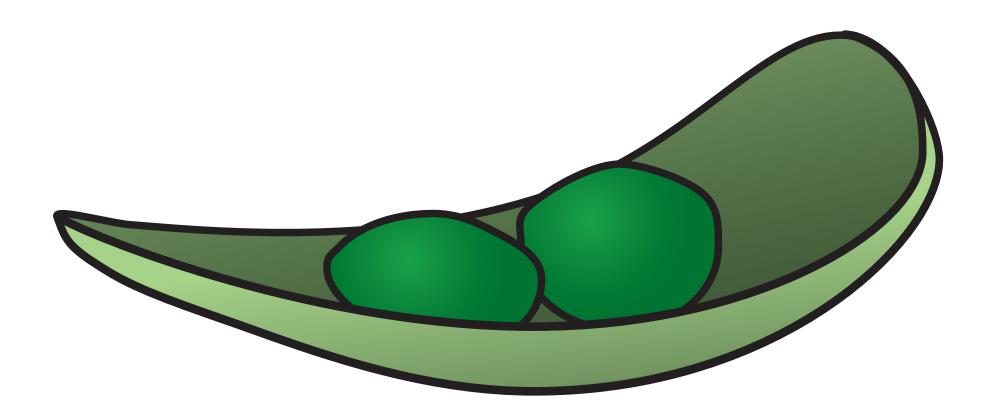


Art+Science



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



+ 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

A tale of a curious affliction



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- + 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







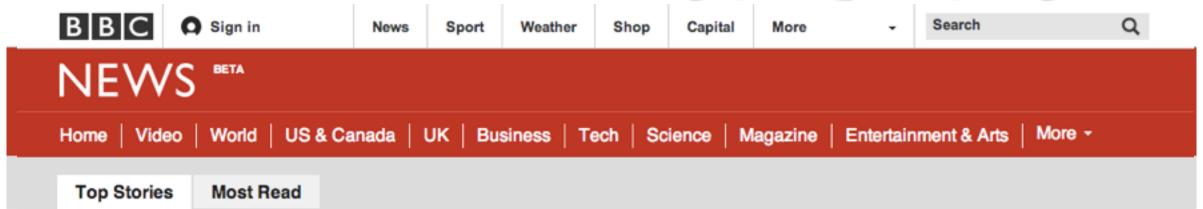




a design company







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**

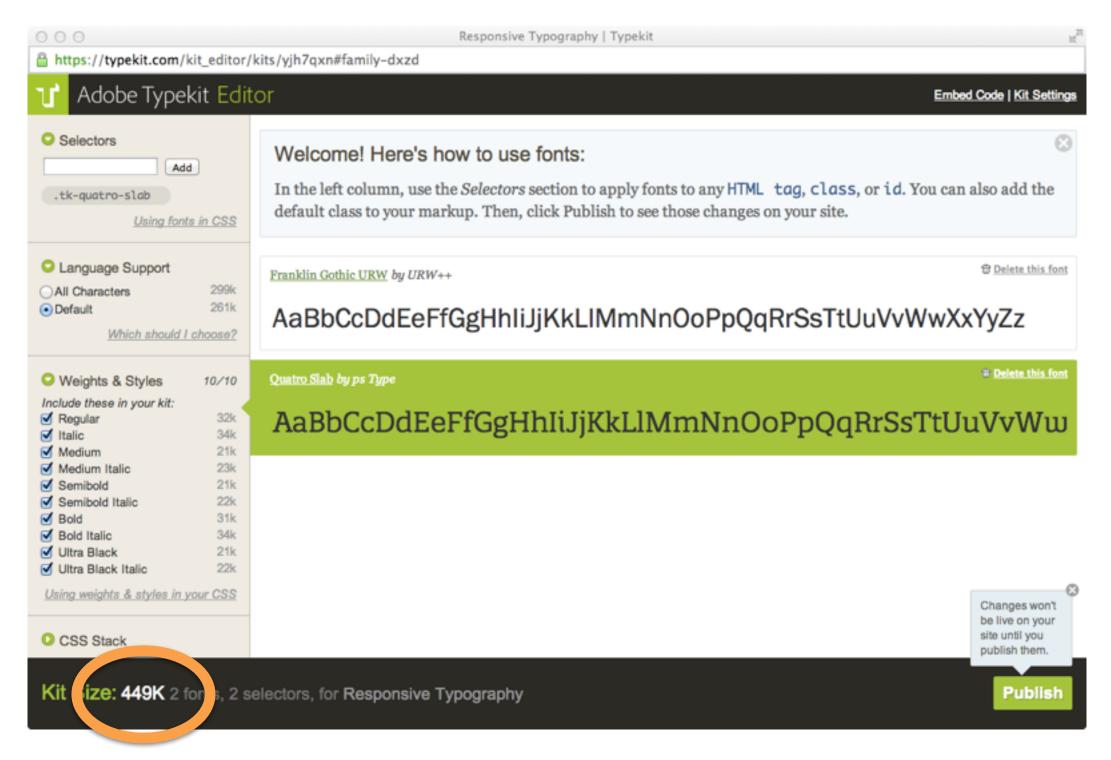
this is a typeface

this is a font

+ Each font has a performance cost, so budget wisely

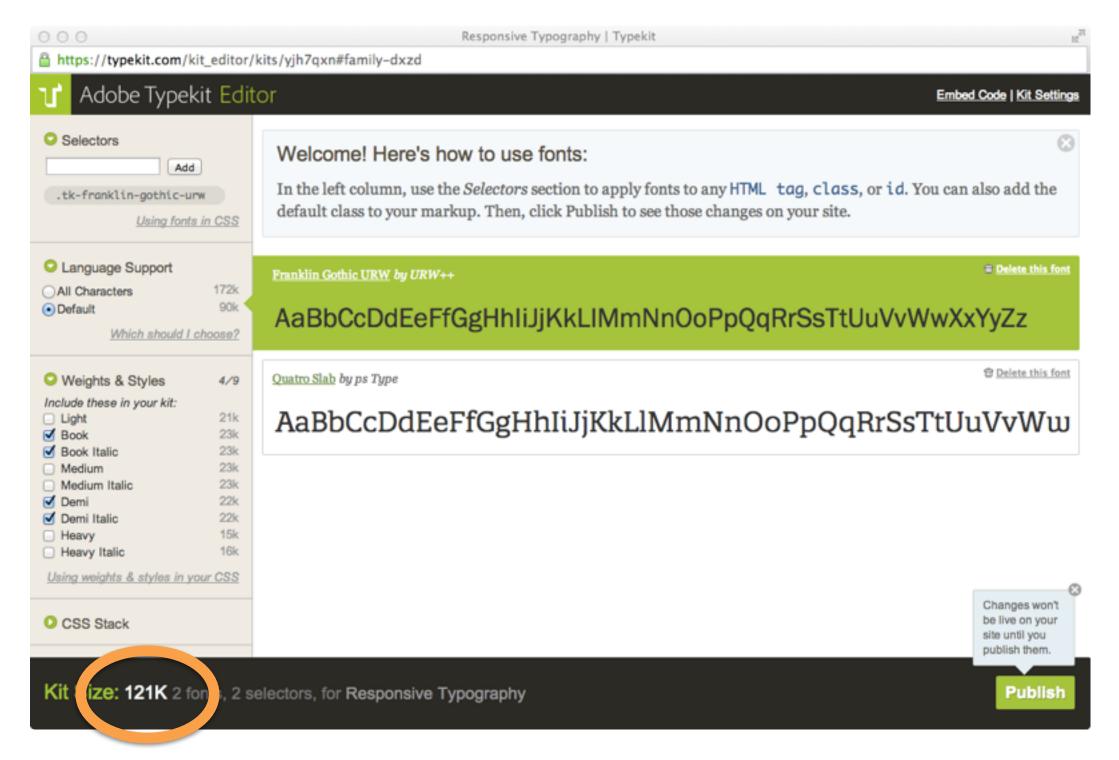


Performance Matters





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



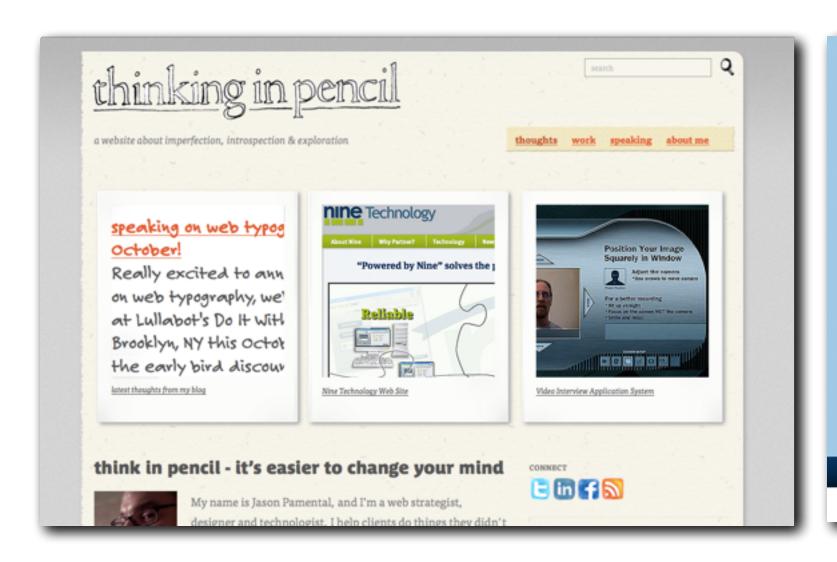
FOUT is OUR fault







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

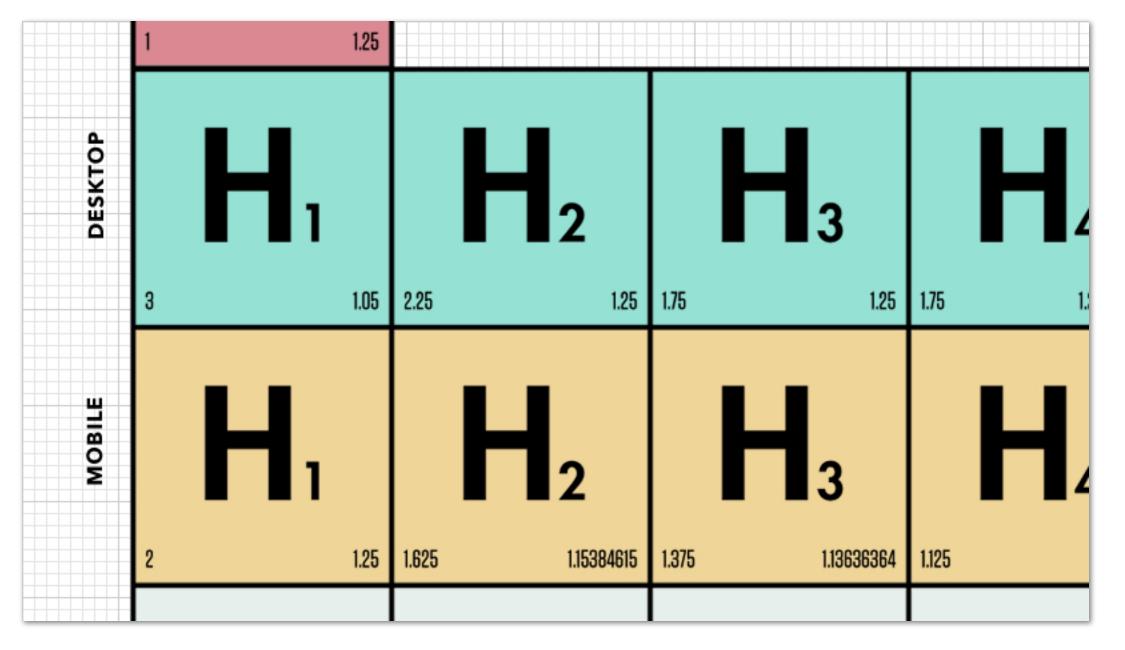
```
<!-- NEEDED FOR NO JS AVAILABILITY -->
<noscript>
    <!-- Use this in as a fallback to no javascript being available -->
    <link href='http://fonts.googleapis.com/css?family=Roboto+Slab:700|Roboto:400,400italic,700italic,700'</pre>
    rel='stylesheet' type='text/css'>
</noscript>
```



Proportion



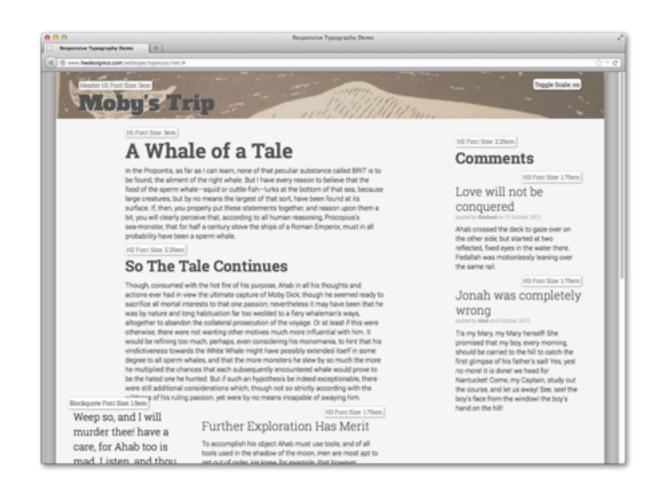
Proportion: one size won't do





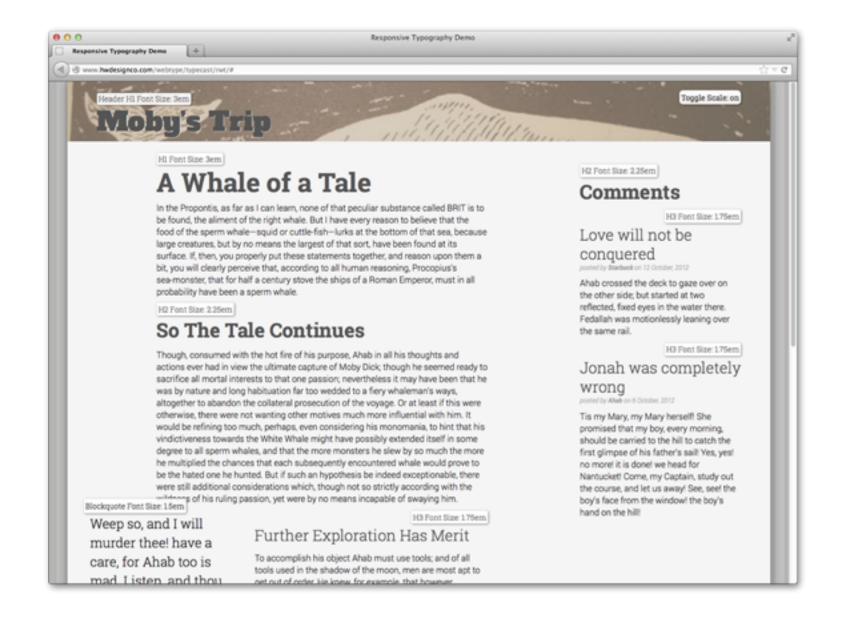
Desktop geese & handheld gander

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





For example...

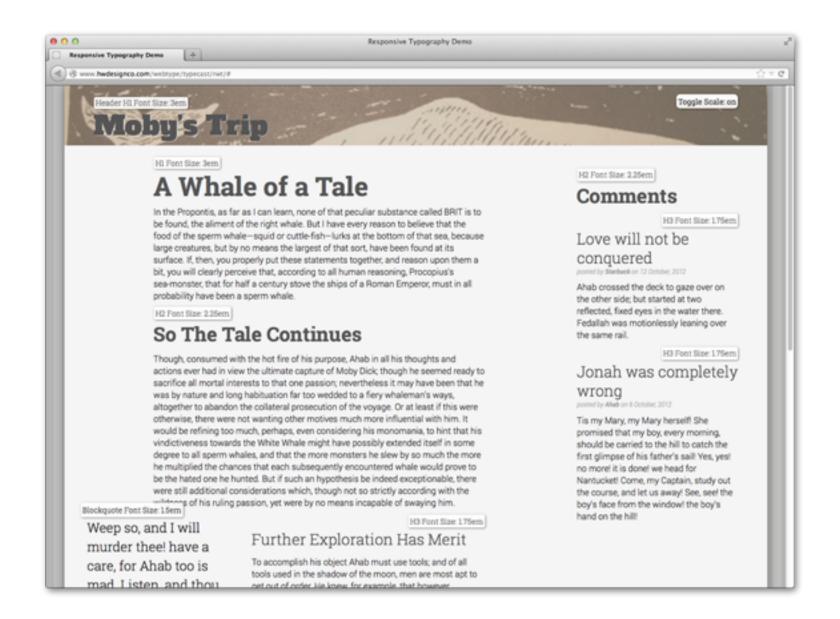


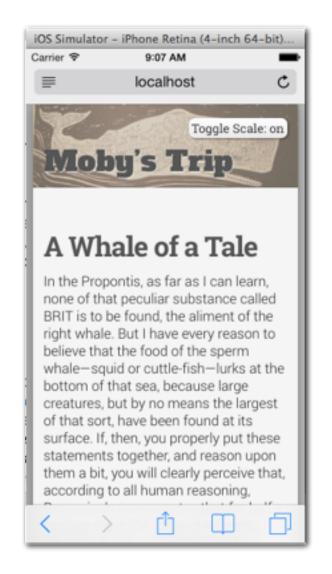




http://bit.ly/jprwt

For example...







http://bit.ly/jprwt

A More Modern Scale

	Print	Desktop (large)	Desktop	Tablet (large)	Tablet (small)	Phone
Body						
Font size: Line height: Line length:	12pt1.2560-75	16px (1em)1.37560-75	16px (1em)1.37560-75	• 16px (1em) • 1.375 • 60-75	• 16px (1em) • 1.25 • 60-75	16px (1em)1.2535-40
H1						
Font size: Line height:	36pt (3em)1.25	48px (3em)1.05	48px (3em)1.05	• 40px (2.5em) • 1.125	• 32px (2em) • 1.25	32px (2em)1.25
H2						
Font size: Line height:	24pt (2em)1.25	36px (2.25em)1.25	36px (2.25em)1.25	• 32px (2em) • 1.25	• 26px (1.625em) • 1.15384615	• 26px (1.625em) • 1.15384615
Н3						
Font size: Line height:	18pt (1.5em)1.25	• 28px (1.75em) • 1.25	• 28px (1.75em) • 1.25	• 24px (1.5em) • 1.25	22px (1.375em)1.13636364	22px (1.375em)1.13636364
H4						
Font size: Line height:	 14pt (1.16666667em) 1.25 	18px (1.125em)1.22222222	• 18px (1.125em) • 1.22222222	• 18px (1.125em) • 1.22222222	• 18px (1.125em) • 1.1111111	• 18px (1.125em) • 1.1111111
Blockquote						
Font size: Line height:	24pt (2em)1.45833333	24px (1.5em)1.458333333	24px (1.5em)1.45833333	24px (1.5em)1.458333333	• 20px (1.25em) • 1.25	• 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



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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.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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been taken away." — Herodotus²



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.



Polish: Don't Leave Orphans Behind

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 http://bit.ly/rt-tpgrfy

 http://bit.ly/drupaltypogrify

 http://bit.ly/rt-tpgrfy-ee

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

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- + 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 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

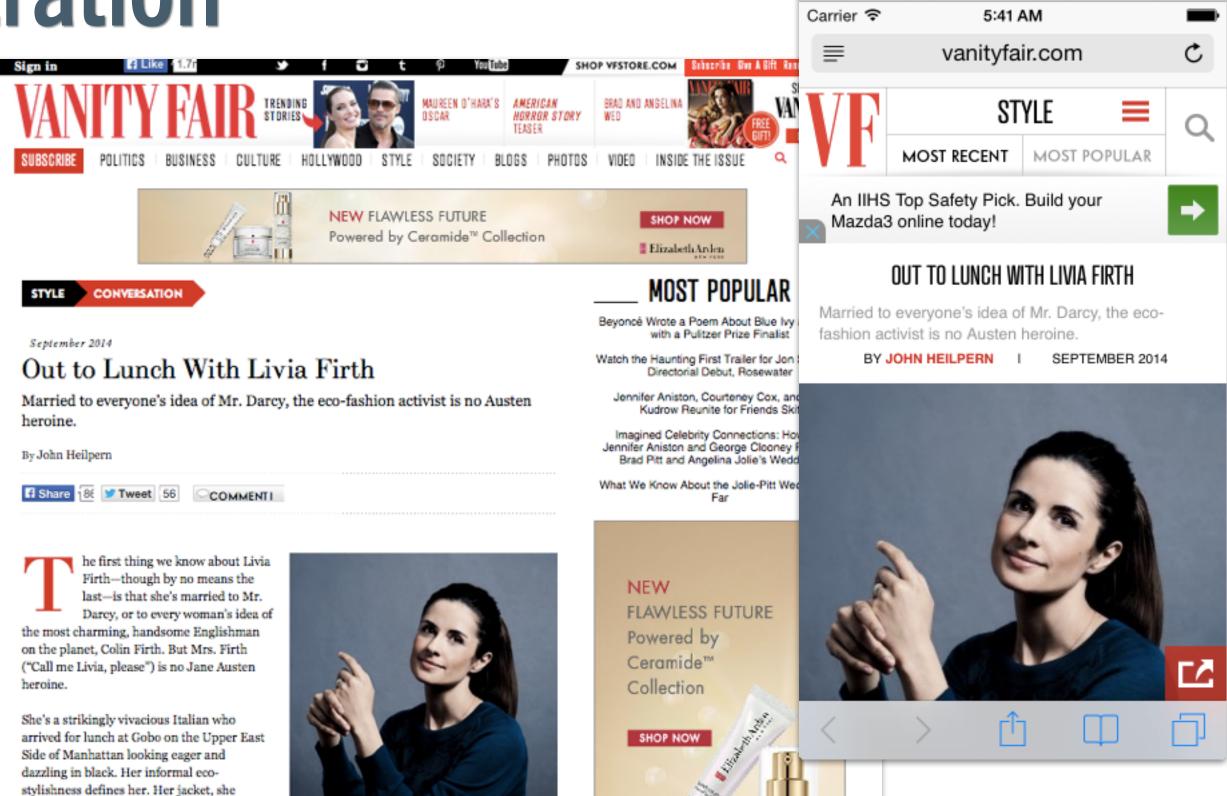




Frustration

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 -

MARRIED TO EVERYONE'S IDEA OF MR. DARCY THE

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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 I-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 Giuggioli," 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 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.



"The poor old fiancé 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 my family and all the Italians was 'Do you really consider this guy sexy?' "

⁶⁶All clothes tell a story. ⁹⁹

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

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Mall clothes tell a story.

"Italians can't deal with English restraint. They think the reserve of an Englishman

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PHOTOGRAPH BY JULIAN BROAD.

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Livia Firth ion't a vegetarian. She likes the

place for its unbentable associado tartare with

SO JOHN HEILPERN

PROTOGRAPH BY JUSTAN BROAD

lings. She made a next link ben activist. "We're trying nowad healthy, avoid pesticides, cut to green," she said. "Why not care also clothes we wear in the same waythey were made, and what they red Buzzwords such as "othical fair eco," and "green" are seighed its the coully buggage of sanctimony fashion, after all, is means to be fa-But the impicus Firth isn't a storon cal eco-warrier. Scenetimes discribed "the Queen of the Green Carpet," th the force behind given fashion on the rel carpet. 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 hallowed 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 panchwork does. It's all a deceptively up serious way to convert powerful countriers to the cause, the replained, and mase 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 on an of phase?" she replied. "Well I'm posters. Roses wasn't built in a do-(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 Gobo is a vegetarian restaurant, but TELL A STORY:

Sens McCarney), who has present the first her't a vegetarian. She likes the Henri Privale, C.E.O. of the lavary con-

giornerate Kering (Gueci, Bottega Veneta,

Sella McCartney), who has invoked many

And the elephant is the room the list

fashion empires? "All clothes tell a story." said the danrifess, leady Laria Firth :



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



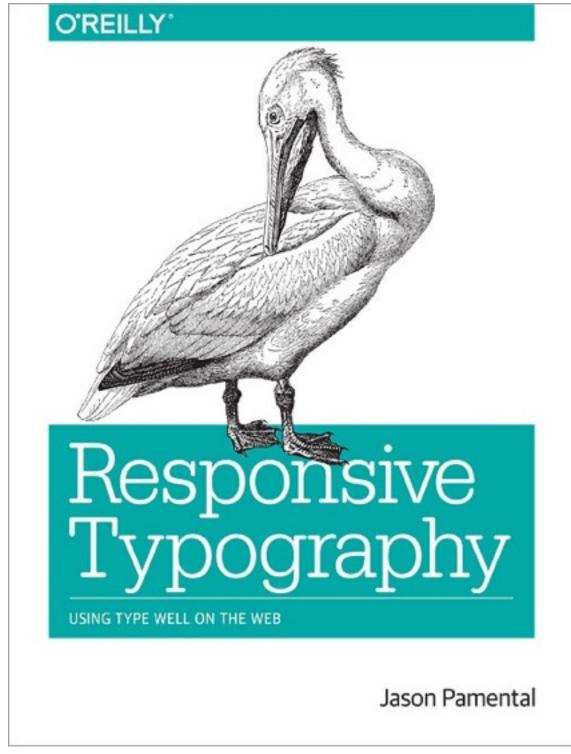
Great typography is greater than the sum of its parts

"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/jpuxfest14

Code: http://bit.ly/rtwcode

