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

dd 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.
Type Is the Voice of Your Words

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

+ 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
Focus on What’s Left: Typography
Focus on What’s Left: Typography
Focus on What’s Left: Typography

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.
Focus on What’s Left: Typography

THE NEW YORKER

SEPTEMBER 16, 2014
JOHN CASSIDY
THE INCOME CHART THAT EXPLAINS AMERICAN POLITICS
BY JOHN CASSIDY

SEPTEMBER 16, 2014
NEWS DESK
A REFERENDUM ON THE UNION JACK
BY VIRGINIA CANNON

SEPTEMBER 16, 2014
DAILY COMMENT
THE DISAPPEARING “UNDE 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

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++

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz

Quatro Slab by ps Type

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWw

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

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++

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz

Quatro Slab by ps Type

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWw
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 = (document.location.protocol == 'https' ? '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

A Whale of a 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. If, then, you properly put these statements together, and reason upon them a bit, you will clearly perceive that, according to all human reasoning, Procopius’s sea-monster, that for half a century stove the ships of a Roman Emperor, must in all probability have been a sperm whale.

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 all mortal interests to that one passion; nevertheless it may have been that he was by nature and long habituation far too wedded to a fiery whaleman’s ways, altogether to abandon the collateral prosecution of the voyage. Or at least if this were otherwise, there were not

Herman Melville
August 1, 1819 - September 28, 1891

No web fonts, uncorrected
Progressively Enhance

Moby’s Trip

A Whale of a 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 cuttlefish—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. If, then, you properly put these statements together, and reason upon them a bit, you will clearly perceive that, according to all human reasoning, Procopius’s sea-monster, that for half a century stove the ships of a Roman Emperor, must in all probability have been a sperm whale.

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 all mortal interests to that one passion; nevertheless it may have been that he was by nature and long habituation far too wedded to a fiery whaleman’s ways, altogether to abandon the collateral prosecution of the voyage. Or at least if this were otherwise, there were not

Herman Melville
August 1, 1819 - September 28, 1891

No web fonts, corrected
Progressively Enhance

Web fonts loaded
Backwards Compatible, Future Friendly

```html
<!-- NEEDED -->
<script type="text/javascript">
    WebFontConfig = {
        google: { families: [ 'Roboto Slab:700', 'Roboto:400,400italic,700italic,700' ] }
    }
    (function() {
        var wf = document.createElement('script');
        wf.type = 'text/javascript';
        wf.async = 'true';
        var s = document.getElementsByTagName('script')[0];
        s.parentNode.insertBefore(wf, s);
    })();
</script>

<!-- NEEDED FOR NO JS AVAILABILITY -->

<!-- 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
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

<table>
<thead>
<tr>
<th></th>
<th>Print</th>
<th>Desktop (large)</th>
<th>Desktop</th>
<th>Tablet (large)</th>
<th>Tablet (small)</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font size:</td>
<td>12pt</td>
<td>16px (1em)</td>
<td>16px (1em)</td>
<td>16px (1em)</td>
<td>16px (1em)</td>
<td>16px (1em)</td>
</tr>
<tr>
<td>Line height:</td>
<td>1.25</td>
<td>1.375</td>
<td>1.375</td>
<td>1.375</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>Line length:</td>
<td>60-75</td>
<td>60-75</td>
<td>60-75</td>
<td>60-75</td>
<td>60-75</td>
<td>35-40</td>
</tr>
<tr>
<td><strong>H1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font size:</td>
<td>36pt (3em)</td>
<td>48px (3em)</td>
<td>48px (3em)</td>
<td>40px (2.5em)</td>
<td>32px (2em)</td>
<td>32px (2em)</td>
</tr>
<tr>
<td>Line height:</td>
<td>1.25</td>
<td>1.05</td>
<td>1.05</td>
<td>1.125</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>H2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font size:</td>
<td>24pt (2em)</td>
<td>36px (2.25em)</td>
<td>36px (2.25em)</td>
<td>32px (2em)</td>
<td>26px (1.625em)</td>
<td>26px (1.625em)</td>
</tr>
<tr>
<td>Line height:</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.15384615</td>
<td>1.15384615</td>
</tr>
<tr>
<td><strong>H3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font size:</td>
<td>18pt (1.5em)</td>
<td>28px (1.75em)</td>
<td>28px (1.75em)</td>
<td>24px (1.5em)</td>
<td>22px (1.375em)</td>
<td>22px (1.375em)</td>
</tr>
<tr>
<td>Line height:</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.13636364</td>
<td>1.13636364</td>
</tr>
<tr>
<td><strong>H4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font size:</td>
<td>14pt (1.166666667em)</td>
<td>18px (1.125em)</td>
<td>18px (1.125em)</td>
<td>18px (1.125em)</td>
<td>18px (1.125em)</td>
<td>18px (1.125em)</td>
</tr>
<tr>
<td>Line height:</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.25</td>
<td>1.1111111</td>
<td>1.1111111</td>
</tr>
<tr>
<td><strong>Blockquote</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Font size:</td>
<td>24pt (2em)</td>
<td>24px (1.5em)</td>
<td>24px (1.5em)</td>
<td>24px (1.5em)</td>
<td>20px (1.25em)</td>
<td>20px (1.25em)</td>
</tr>
<tr>
<td>Line height:</td>
<td>1.458333333</td>
<td>1.45833333</td>
<td>1.45833333</td>
<td>1.45833333</td>
<td>1.25</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Polish
Polish: Don’t Forget Fit & Finish

Moby’s Trip

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

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
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.

"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

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.

"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
Polish: Don’t Leave Orphans Behind

+ Typogrify FTW:

+ Also try Widowtamer for JS drop-in solution:

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

+ CSS3 brings character counts, but not universal
  
  ```css
  (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

Life at Yale

Admissions  Academics  Funding & Aid  Academic & Professional Development

Life At Yale  McDougal Graduate
True Life Story

Life at Yale

Life At Yale

McDougal Graduate

-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
A Sneak Peek

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.

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, 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.
Realization

+ Oversize 2-level header
+ Stylized subhead
+ Byline
+ Large initial cap
+ Inset photo
+ Pull-quote
+ Virtually no extra markup necessary
+ Fully responsive
T
he first thing we know about Livia Firth—is that we love her. She's a woman who
embraces the world of fashion and sustainability. Her influence is enormous and
influential. She wears clothes that are both stylish and sustainable. She
jacket, she wears a Michael Kors shirt, and organic jeans. She's a
fashion icon, a role model, and an inspiration. She's a
companion in style and substance.

Livia Firth was born in London and has lived there most of her
life. She grew up in a family where sustainability was
emphasized. Her parents instilled the importance of
conservation and environmental responsibility early on.

Livia is known for her passion for sustainable fashion and
her commitment to making the fashion industry more
sustainable. She founded the eco-fashion brand,
Livia Firth, to raise awareness about the impact of
the fashion industry on the environment.

Firth's work has been widely recognized and she has
won several awards for her contributions to the
environment and sustainability. She is a true
innovator in the fashion world.

Firth is also known for her keen fashion sense and
her ability to mix sustainable materials with
traditional fashion. She has been called a
"sustainable fashion icon" and has been featured in
several fashion publications.

Livia Firth is a true trailblazer in the world of
fashion and sustainability. Her work is
inspiring and her message is clear: fashion can be
beautiful, sustainable, and ethical.
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!

Thank You

Jason Pamental (@jpamental)