

# Responsive Typography

*Designing for Readability & Meaning on Any Screen*

# Who Am I?

# Who Am I?

Jason Pamental (@jpamental)

# Who Am I?

Jason Pamental (@jpamental)

+ Co-founder of   
a design company

# Who Am I?

Jason Pamental (@jpamental)

+ Co-founder of  h+w  
a design company

+ Tinkerer with



# Who Am I?

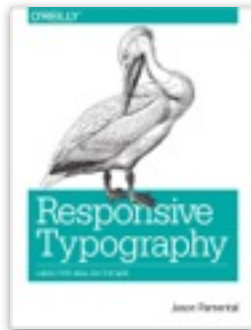
Jason Pamental (@jpamental)

+ Co-founder of  h+w  
a design company

+ Tinkerer with



+ Author of this



# Who Am I?

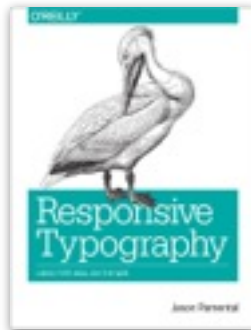
Jason Pamental (@jpamental)

+ Co-founder of 

+ Tinkerer with



+ Author of this



+ Co-parent of



# What We'll Cover



# What We'll Cover

+ Lies & deceptions

# What We'll Cover

- + Lies & deceptions
- + An honest reconciliation

# What We'll Cover

- + Lies & deceptions
- + An honest reconciliation
- + What is Responsive Typography

# What We'll Cover

- + Lies & deceptions
- + An honest reconciliation
- + What is Responsive Typography
- + Making your typography responsive

# What We'll Cover

- + Lies & deceptions
- + An honest reconciliation
- + What is Responsive Typography
- + Making your typography responsive
- + Putting it all together

# Art & Technology: A Historical Romance

# Art & Technology: A Historical Romance



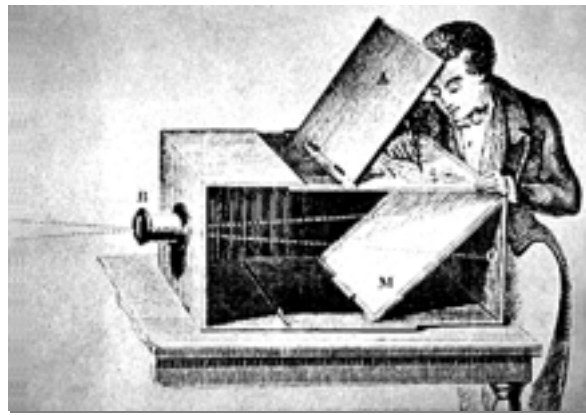
DaVinci?

That guy would code

# Art & Technology: A Historical Romance



DaVinci?  
That guy would code



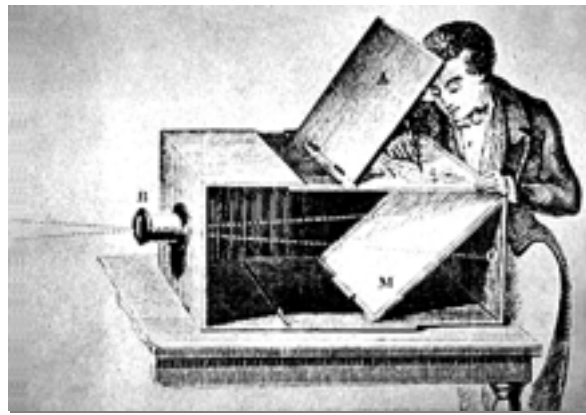
Vermeer:  
Master or Technician?



# Art & Technology: 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*

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

*~ @sblakeborough, via twitter*

# We can't.

# We can't.

- + Encompasses all of what you know about type & its use, but

# We can't.

- + Encompasses all of what you know about type & its use, but
- + Typography on the web requires additional consideration (art & science)

# We can't.

- + 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



# We can't.

- + 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

**It's not what we don't  
know that'll kill us**

**It's not what we don't  
know that'll kill us**

***It's what we willfully ignore***

# A Long Road to a Make-Believe Place

# A Long Road to a Make-Believe Place

- + We prop up our vision of the world with tricks & misconceptions

# A Long Road to a Make-Believe Place

- + We prop up our vision of the world with tricks & misconceptions



960px

# A Long Road to a Make-Believe Place

- + We prop up our vision of the world with tricks & misconceptions



# A Long Road to a Make-Believe Place

- + We prop up our vision of the world with tricks & misconceptions

***“A page is not a valuable concept even for someone who wants to read a book.”  
Jeff Eaton (@eaton)***





# Take Away What We Can't Know

# Take Away What We Can't Know

+ Screen size

# Take Away What We Can't Know

- + Screen size
- + Device capabilities

# Take Away What We Can't Know

- + Screen size
- + Device capabilities
- + Concurrent activities

# Take Away What We Can't Know

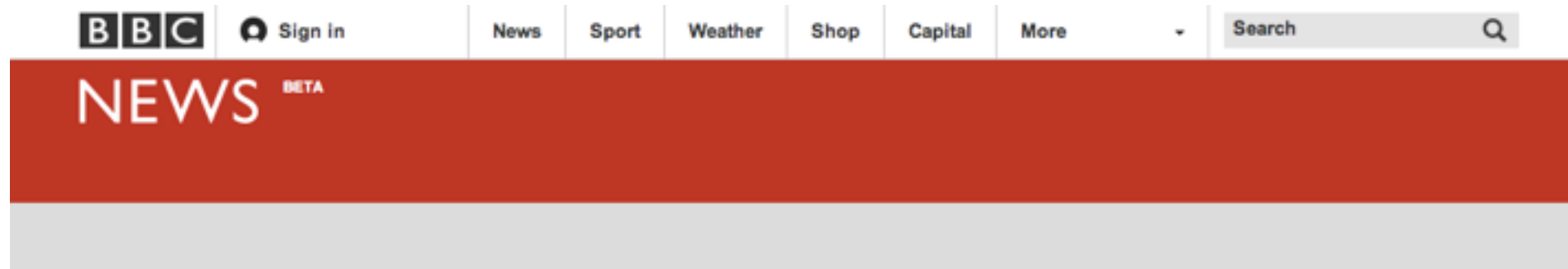
- + Screen size
- + Device capabilities
- + Concurrent activities
- + Depth of focus

# Take Away What We Can't Know

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

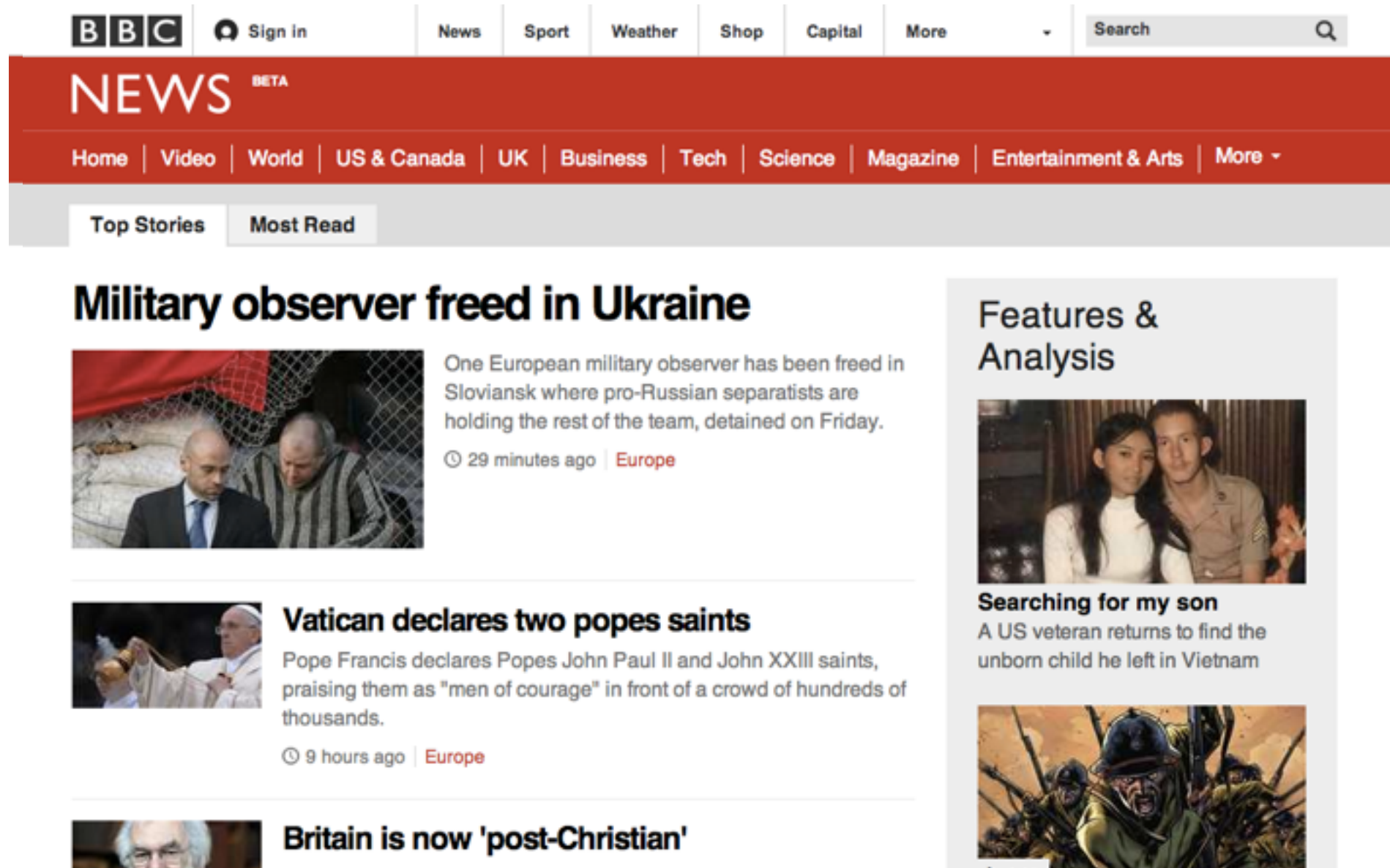
# Focus on What's Left:

# Focus on What's Left:





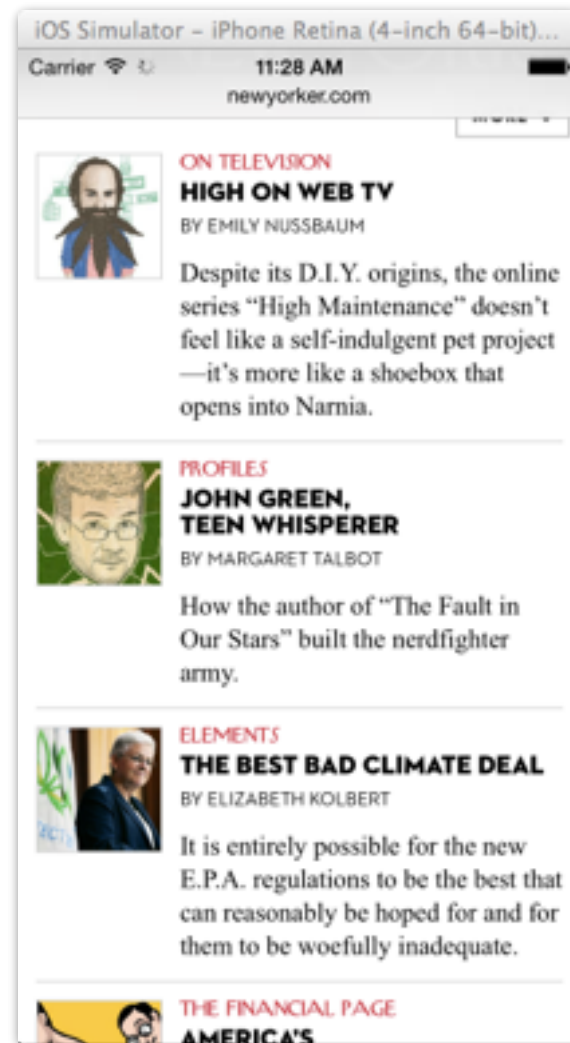
# Focus on What's Left:



# Focus on What's Left:



# Focus on What's Left:



# Four Simple Steps

# Four Simple Steps

- + **Performance:** select fonts with care, load what you need & **don't block the page draw**

# 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**

# 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**

# 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 **/S** the details: **OpenType** & then some



# Performance Matters

# Performance Matters

+ Great typography isn't 'I used all of them'

# Performance Matters

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

Trade Gothic Next LT Pro **Bold**

# 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*

# 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*

# 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*

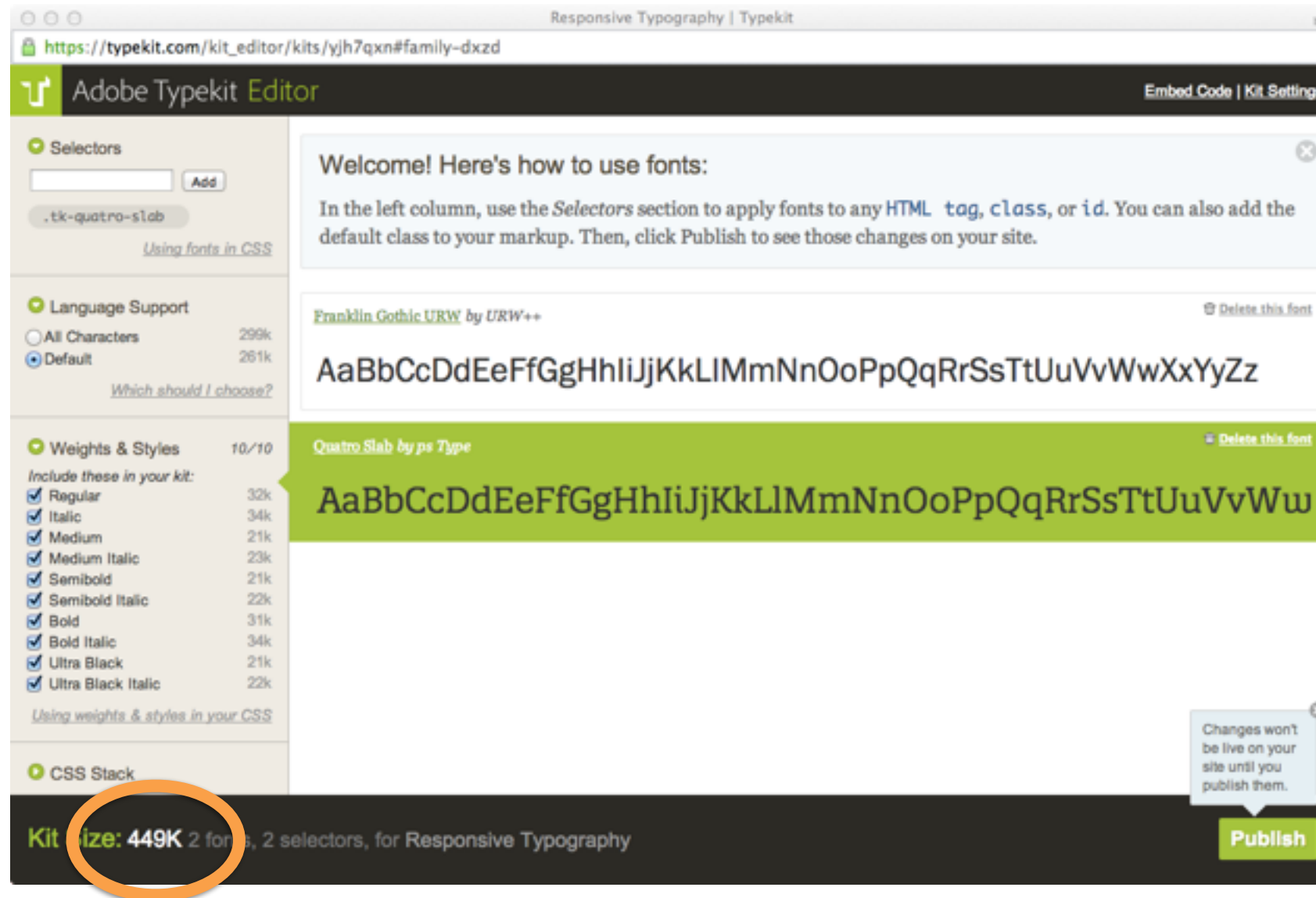
---

*this is a font*

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

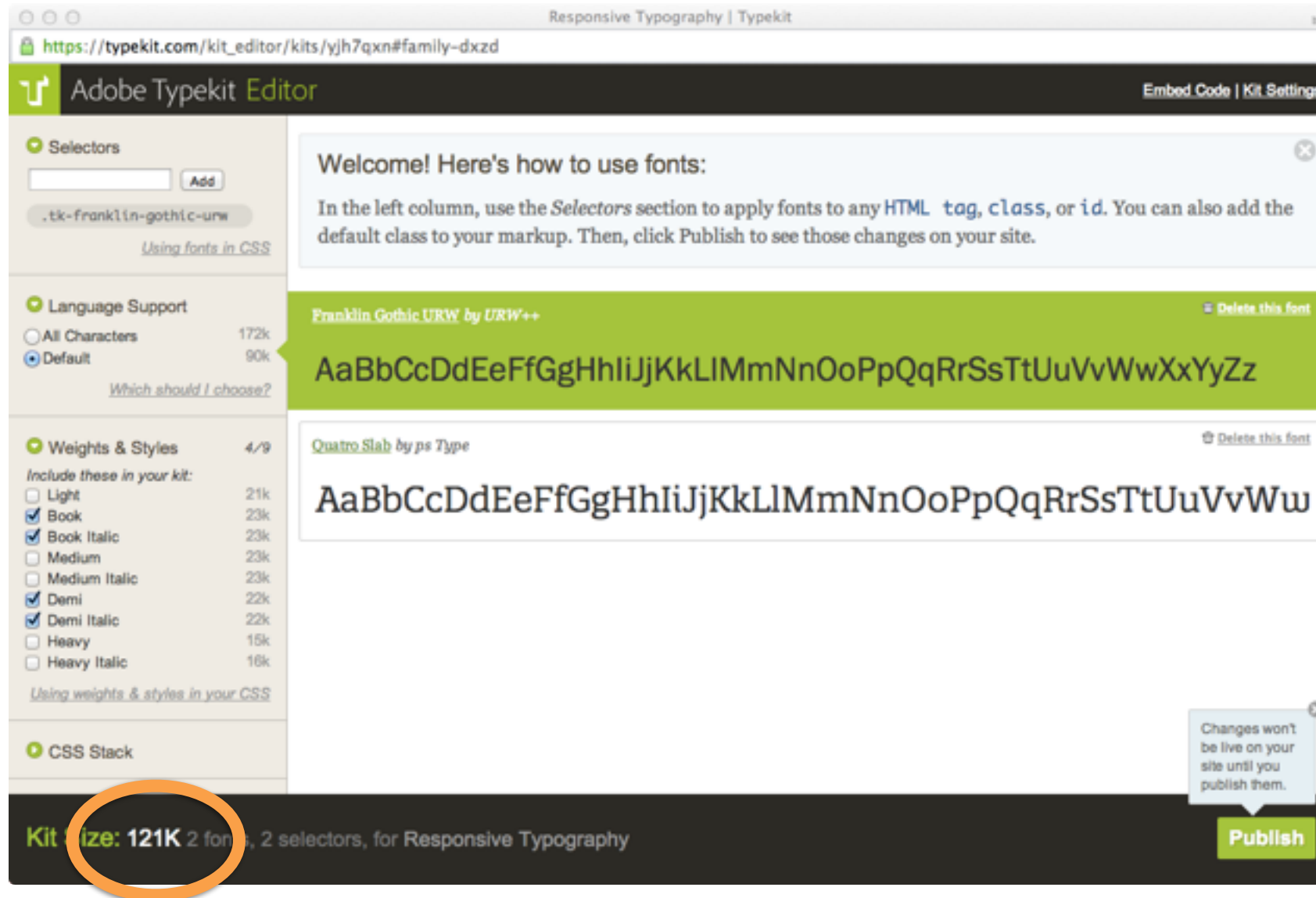
# Performance Matters

# Performance Matters



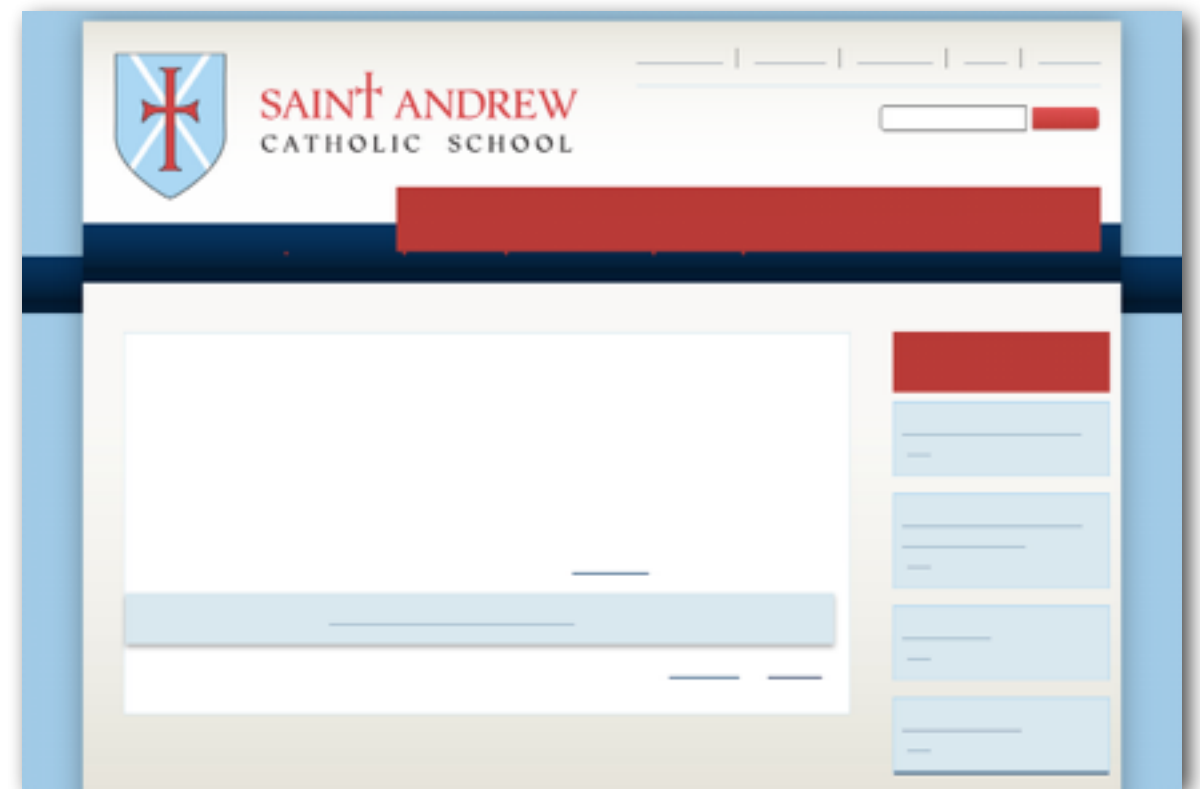


# Performance Matters

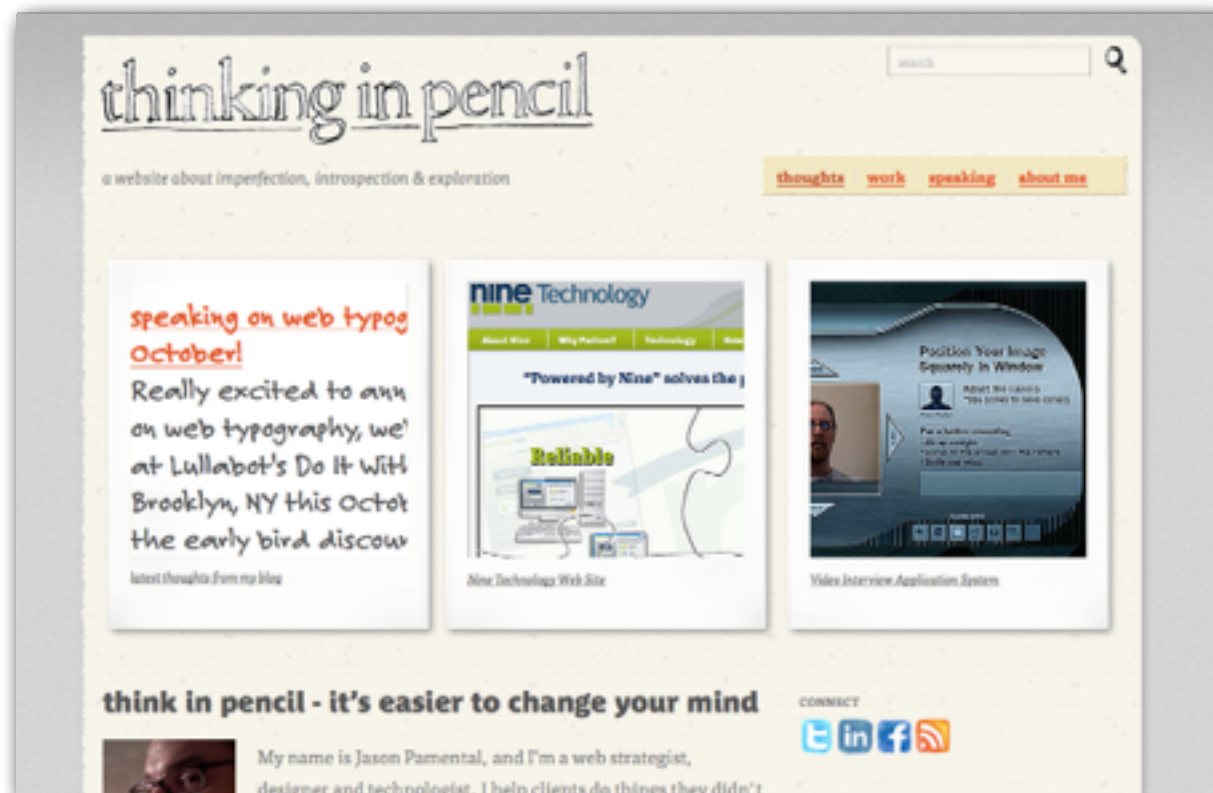


# FOUT is *OUR* fault

# FOUT is *OUR* fault



# FOUT is *OUR* fault



# FOUT is *OUR* fault

# FOUT is *OUR* fault

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

# 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; }
```

# 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; }
```



# 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

# 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

# Progressively Enhance



Web fonts loaded

# Progressively Enhance



No web fonts, uncorrected



# Progressively Enhance



No web fonts, corrected

# Progressively Enhance



Web fonts loaded

# Progressively Enhance



# Progressively Enhance

```
<!-- 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: one size won't do

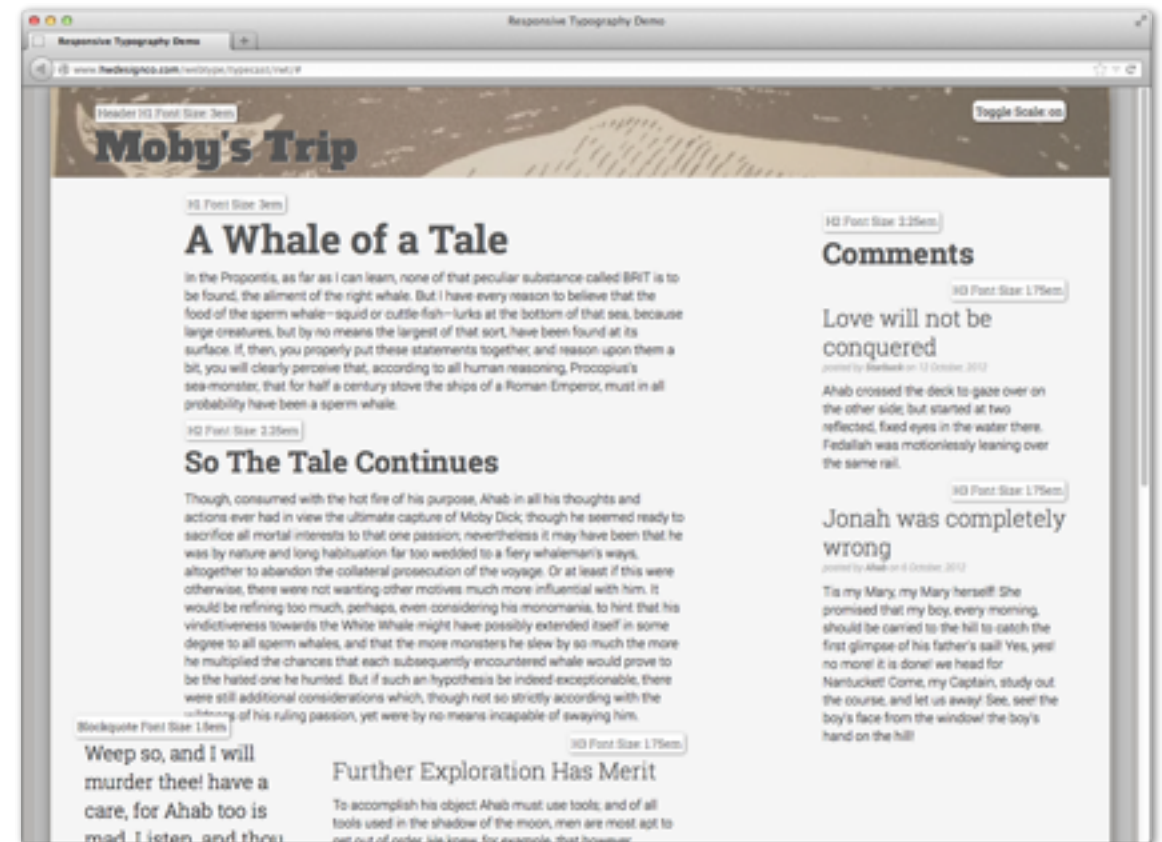
# Proportion: one size won't do

	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

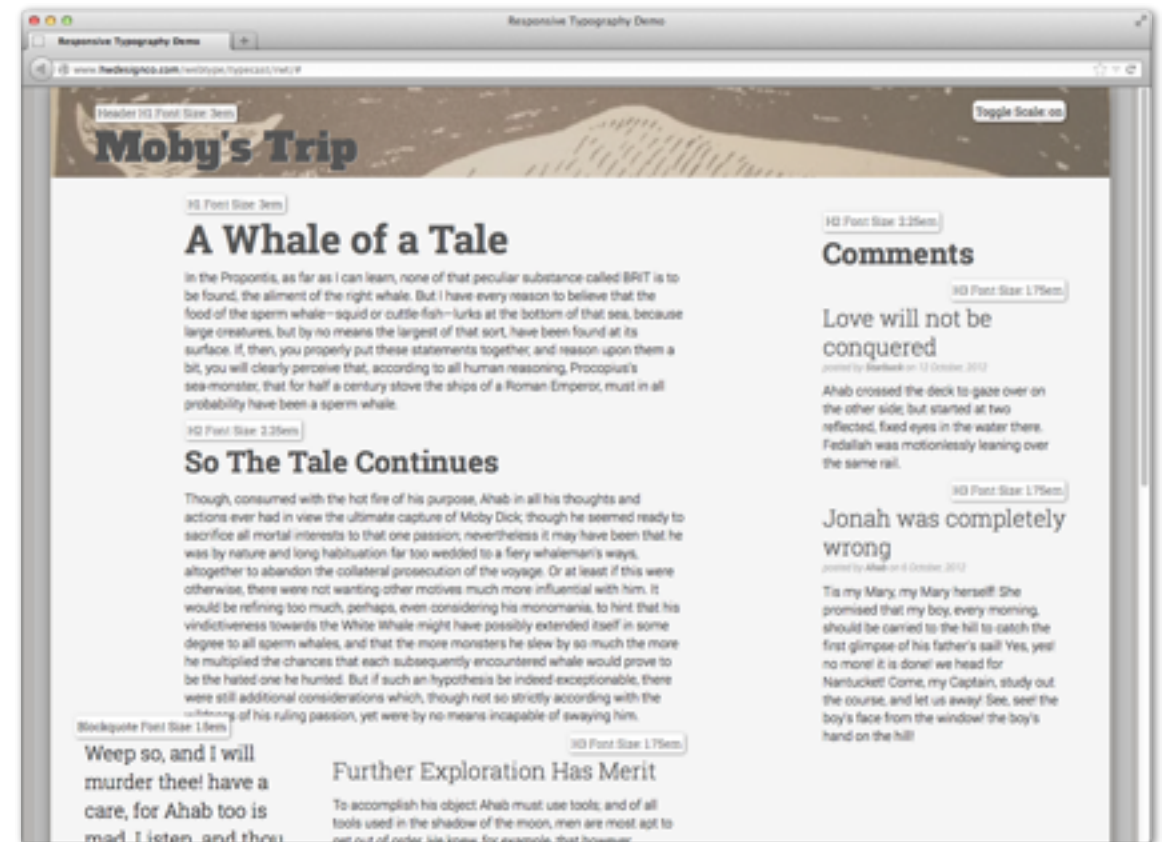
# Desktop geese & handheld gander

- + Small canvas requires subtle proportions



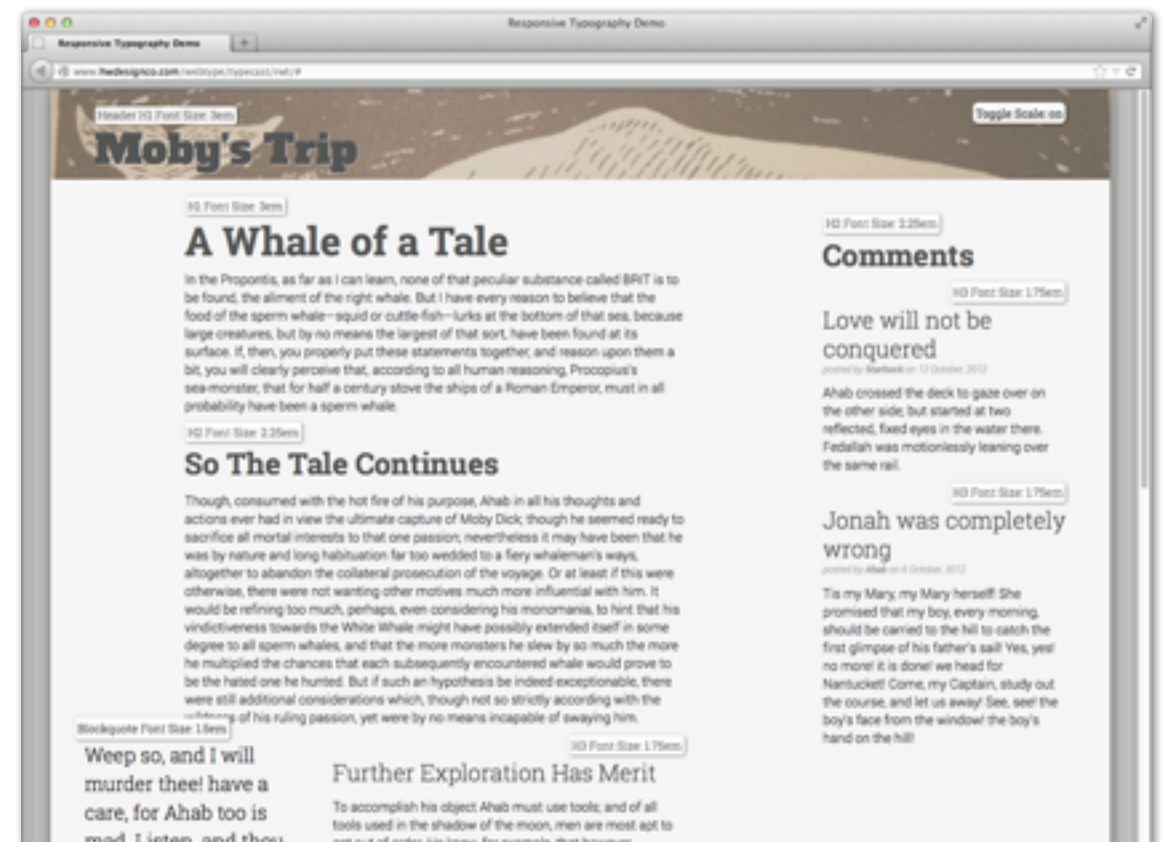
# Desktop geese & handheld gander

- + Small canvas requires subtle proportions
- + What works in print... works in print



# Desktop geese & handheld gander

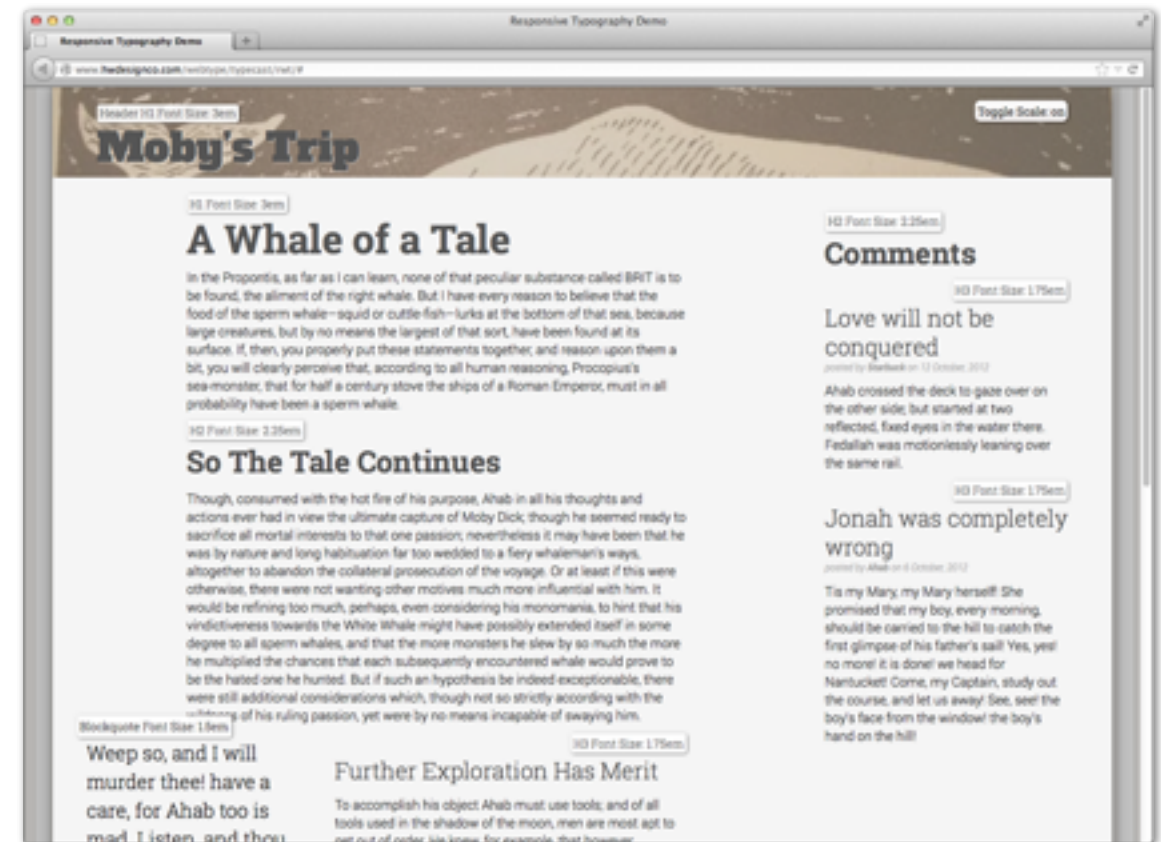
- + Small canvas requires subtle proportions
- + What works in print... works in print
- + Robert Bringhurst matters, but scale must adapt



<http://bit.ly/jprwt>

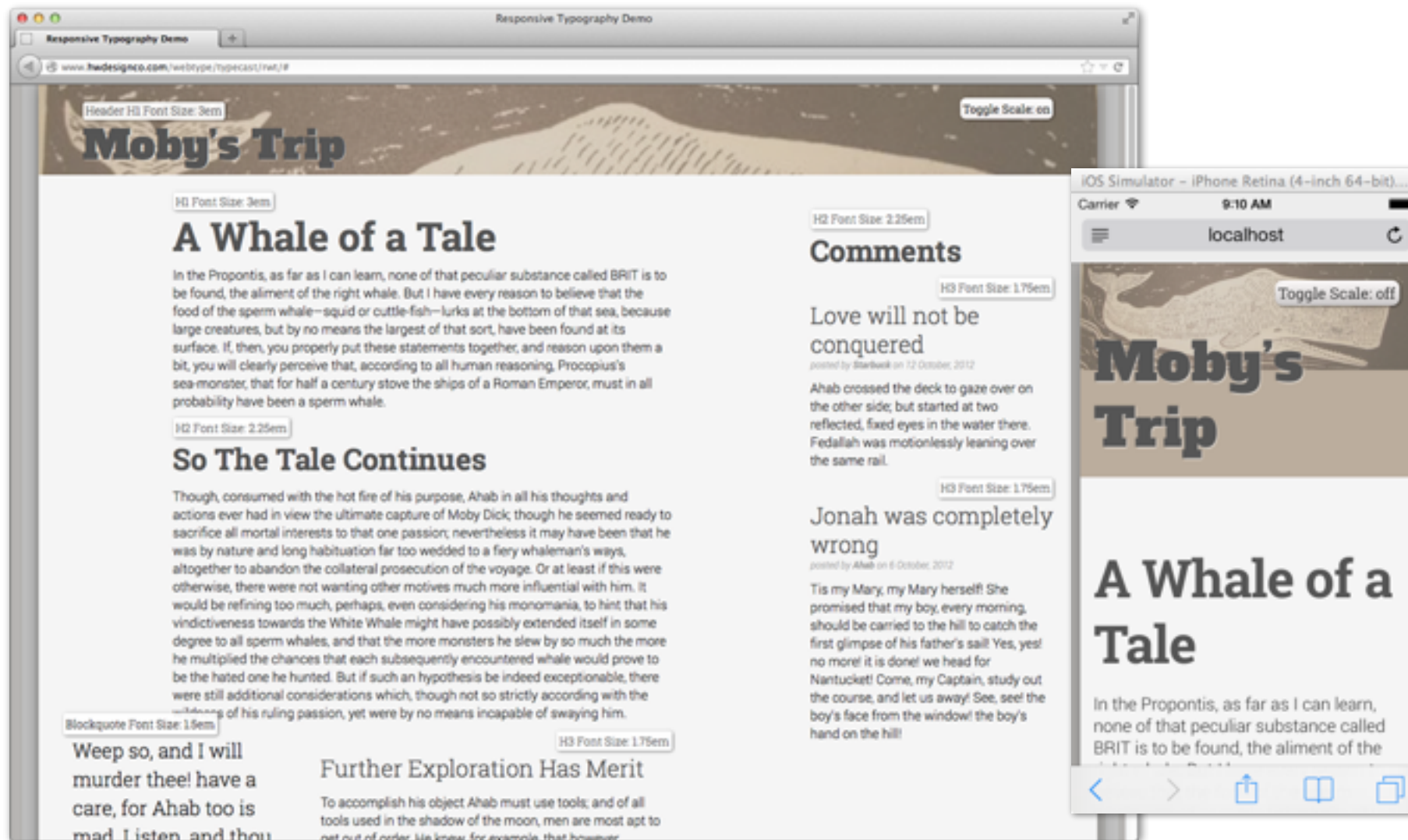


# For example...

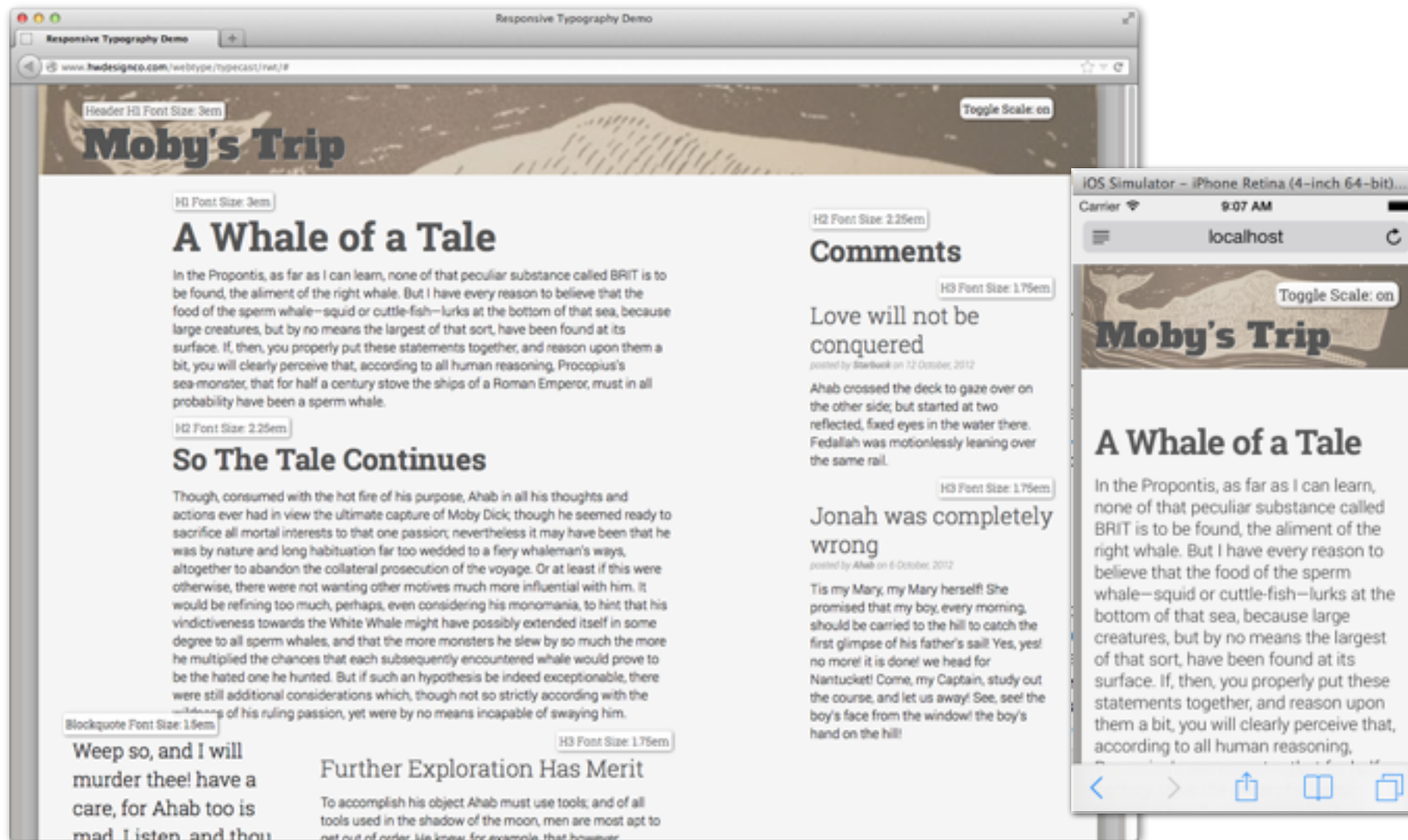




# For example...



# For example...



<http://bit.ly/jprwt>

hwdesignco.com | @jpamental | CSS Summit | #CSSSUMMIT

# A More Modern Scale

# A More Modern Scale

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

<http://bit.ly/jprwt>

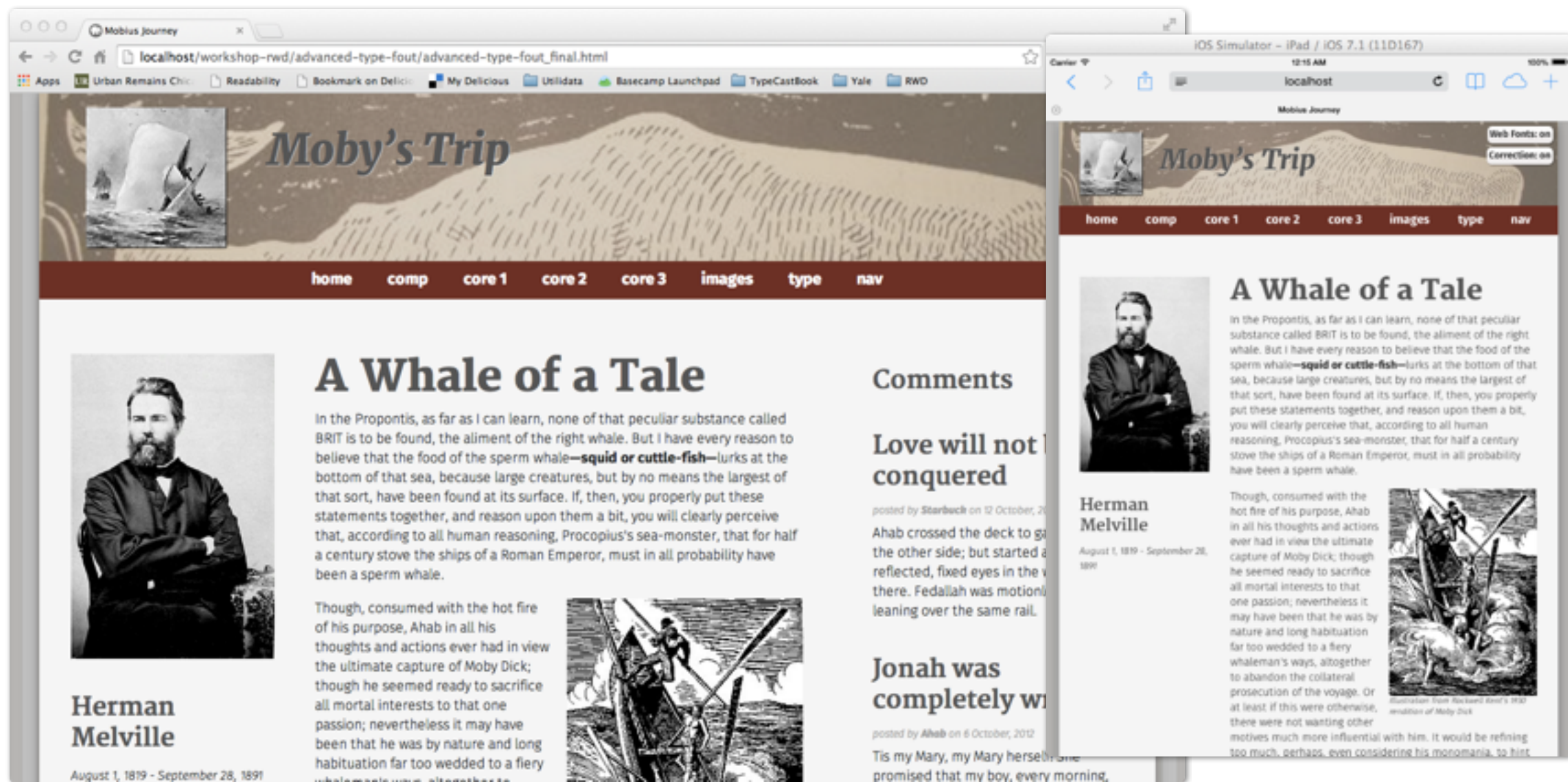
# Measure & Scale



# Measure & Scale

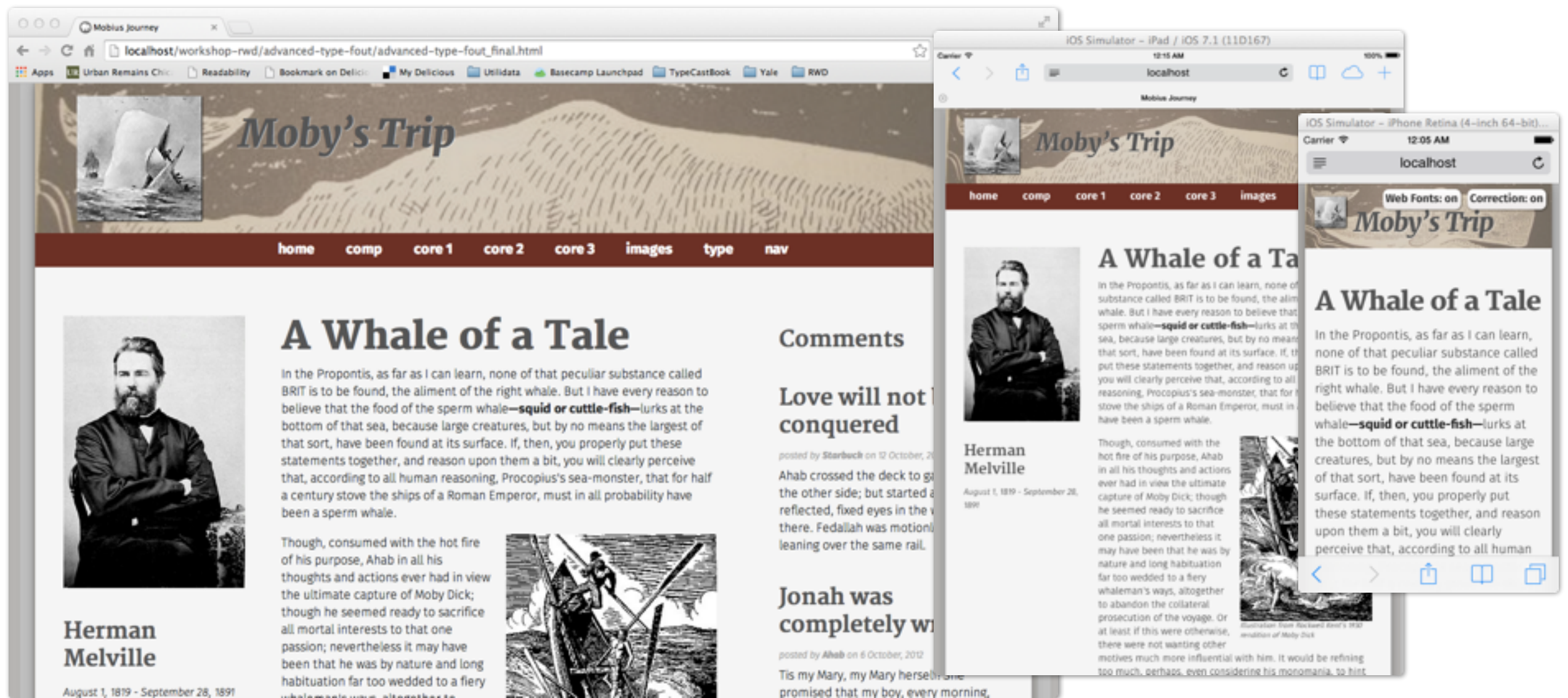


# Measure & Scale





# Measure & Scale



<http://bit.ly/jprwt>

hwdesignco.com | @jpamental | CSS Summit | #CSSSUMMIT



# Measure & Scale

# Measure & Scale

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

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

# Measure & Scale

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

```
@media (min-width: 58em) {  
  p { max-width: 38em; }  
}
```
- + CSS3 brings character counts, but not universal (ch & cx)

# Measure & Scale

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

```
@media (min-width: 58em) {  
  p { max-width: 38em; }  
}
```
- + CSS3 brings character counts, but not universal (ch & cx)
- + **EMs** or **REMs**, but no PX

# Measure & Scale

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

```
@media (min-width: 58em) {  
  p { max-width: 38em; }  
}
```
- + CSS3 brings character counts, but not universal (ch & cx)
- + **EMs** or **REMs**, but no PX
- + Don't forget: use real content!  
*Because Lorem Ipsum is a poser*

# Polish: Don't Forget Fit & Finish

# 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

### **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



# OpenType Demo

## Fractions

Automatically converts 1 / 2 to a nice tasty fraction. Only could be better with frosting. Enabled: Sabon Italic with Fractions & Old Style Figures (like having one's cake and eating it too)

× Feature: Off

### *Swedish Hardtack*

*1 cup water  
1 1/2 oz vegetable oil  
1 1/2 oz honey  
1 1/2 cups rye & 1 1/2 cups whole wheat flour  
1 1/2 tbsp. brewer's yeast (optional)  
1/4 tsp. salt*

# OpenType Demo

## Fractions

Automatically converts 1 / 2 to a nice tasty fraction. Only could be better with frosting. Enabled: Sabon Italic with Fractions & Old Style Figures (like having one's cake and eating it too)

✓ Feature: On

### *Swedish Hardtack*

*1 cup water*

*1 ½ oz vegetable oil*

*1 ½ oz honey*

*1 ½ cups rye & 1 ½ cups whole wheat flour*

*1 ½ tbsp. brewer's yeast (optional)*

*¼ tsp. salt*

# Polish: Don't Forget Fit & Finish

# 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.<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>

# 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.<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>

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.<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>

# Polish: Don't Leave Orphans Behind

# Polish: Don't Leave Orphans Behind

## 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

Typogrify Module FTW: <http://bit.ly/drupaltypogrify>

Widowtamer from Nathan Ford: <http://bit.ly/widotamer>



# Polish: Don't Leave Orphans Behind

## 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.

Typogrify Module FTW: <http://bit.ly/drupaltypogrify>

Widowtamer from Nathan Ford: <http://bit.ly/widotamer>



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

*~ Mustafa Kurtuldu (@Mustafa\_x)  
FOWD London*

# Responsive Web Typography

# Responsive Web Typography

+ Yes, it's a thing

# Responsive Web Typography

- + Yes, it's a thing
- + It's about **adapting** to screen **size**, network **speed** & **device capabilities**

# 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**

# 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***

# 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



# Responsive Web Typography

## + Performance

- Stats, Platforms & Screen Tests

# Responsive Web Typography

## + Performance

- Stats, Platforms & Screen Tests

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

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

# 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)

# Responsive Web Typography

## + Performance

- Stats, Platforms & Screen Tests

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

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

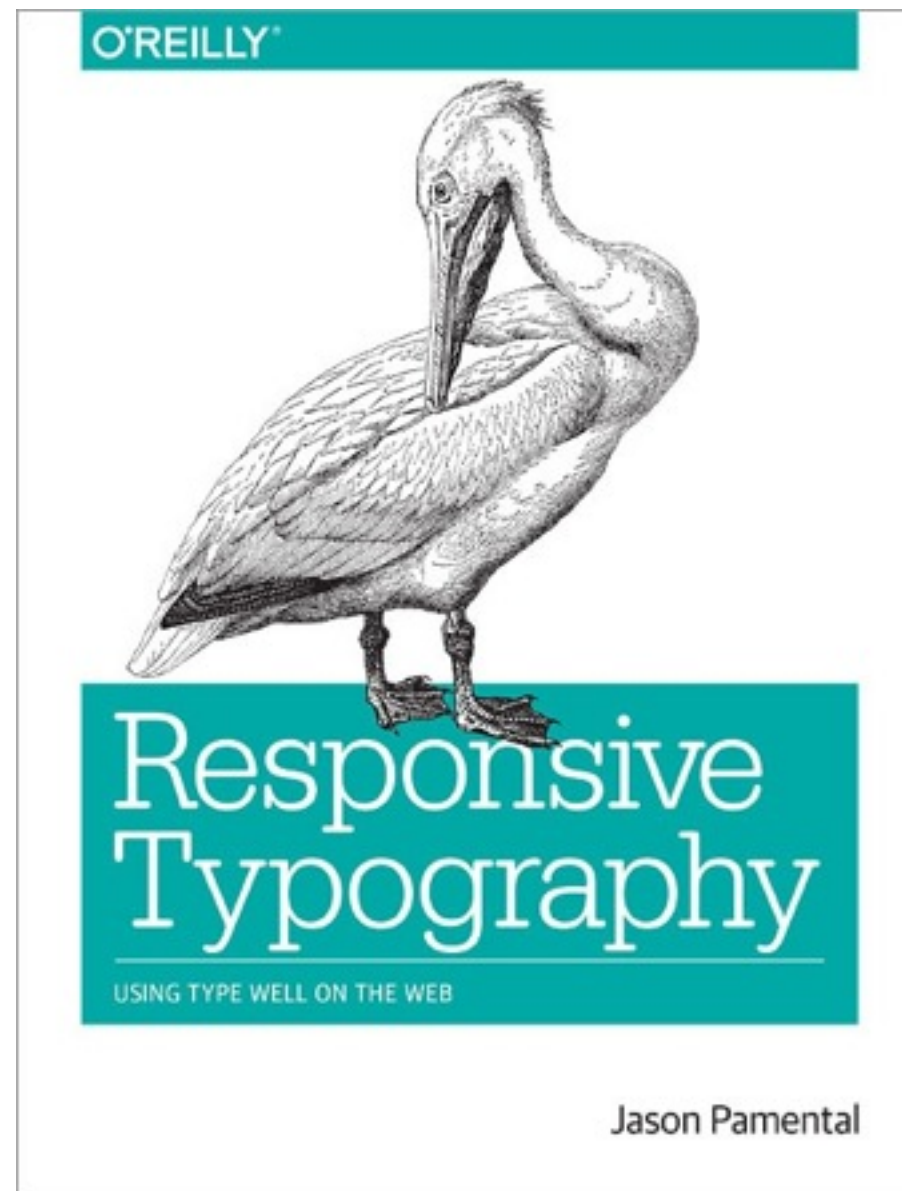
## + Proportion

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

## + Polish

# Just out!

# Just out!



<http://bit.ly/rwtbook>

# Thank You

*Jason Pamental (@jpamental)*

Slides here: <http://bit.ly/jpcsssummit>