The WEIGHT of the WEB

regarding the

PHYSICALITY OF DIGITAL MEDIA

and the

SPREAD OF INFORMATION

DAVID DEMAREE

TYPO BERLIN 2013 TOUCH
INFORMATION can be powerful when it is able to spread

As designers, our role is to help it spread
Historically, the biggest barriers to spreading information have been physical constraints.
LECTERN OR PULPIT BIBLES

Richly detailed, but not at all portable
GIDEON BIBLE
Not a beautiful object but UBIQUITOUS
Physical media must balance

RICHNESS  VS.  REACH
The level of detail in a given piece of information  How widely it can be distributed
Progression of printing technology

Movable type
Only text

Printing press
Text + illustration

Lithography
B&W photo

Offset
Color

Digital
Cheap, easy color

Gregor then turned to look out the window at the dull weather. Drops of rain could be heard hitting the pane, which made him feel quite sad. "How about if I sleep a little bit longer and forget all this nonsense", he thought, but that was something he was unable to do because he was used to sleeping on his
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Once a printing process can reproduce a photograph, *everything* is effectively a photograph.
The September issue of U.S. Vogue
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Print edition weighs 4.5 lbs (2 kg)

71% of pages are adverts
We do not typically see the web as having physicality
We do not typically see the web as having physicality

AND YET
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AND YET

Images have

DIMENSIONS

1920px

2890px
We do not typically see the web as having physicality

AND YET

Images have
DIMENSIONS

2890px
1920px

549 KB

Files have
WEIGHT

2890px
We do not typically see the web as having physicality

AND YET

Images have
DIMENSIONS

1920px

Files have
WEIGHT

549 KB

59% downloaded, 1s remaining

Networks have
BANDWIDTH

2890px
The web is a physical medium
BUT IF

The web is
A PHYSICAL MEDIUM

how have we managed not to
ACKNOWLEDGE ITS CONSTRAINTS?
The desktop PC became the web’s reference platform
The desktop PC became the web’s reference platform

1024×768px or larger
Around 110 ppi
Millions of colors
The desktop PC became the web’s reference platform.

- 1024×768px or larger
- Around 110 ppi
- Millions of colors

Wired or wireless broadband.
World Wide Web

The WorldWideWeb (W3) is a wide-area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an executive summary of the project, Mailing lists, Policy, November's W3 news, Frequently Asked Questions.

What's out there?
- Pointers to the world's online information, subjects, W3 servers, etc.

Help
- on the browser you are using

Software Products
- A list of W3 project components and their current state. (e.g. Line Mode, X11, Viola, NeXTStep, Servers, Tools, Mail robot, Library)

Technical
- Details of protocols, formats, program internals etc

Bibliography
- Paper documentation on W3 and references.

People
- A list of some people involved in the project.

History
- A summary of the history of the project.

How can I help?
- If you would like to support the web.

Getting code
- Getting the code by anonymous FTP, etc.
World Wide Web

The WorldWideWeb (W3) is a powerful tool for publishing and accessing documents.

Everything there is online about W3 is accessible to users through the browser you are using.

What’s out there?

Pointers to the world’s online web content and software products are available on the browser you are using.

A list of W3 project contributors and a detailed bibliography for W3 is available.

A list of some people involved in W3 development and a summary of the history of W3 are also available.

If you would like to support W3 development, getting the code from a repository is possible.
BEST BEAUTY MOMENTS
FROM THE 2013 MET GALA
SEE THE SLIDESHOW
Initial page load is 768 KB

Over the course of a single visit, Vogue.com loads over 1.5 MB of additional content
Even though technology has finally progressed, the conventions of web design remain firmly rooted in PRINT
And then,
A CHANGE
New screens
Much web content is now consumed in **DIFFERENT PHYSICAL CONTEXTS** from where it was created.
Wireless
Wireless

Most users don’t yet have LTE
Wireless

Most users don’t yet have LTE

Many don’t have HSDPA or 3G
Most users don’t yet have LTE
Many don’t have HSDPA or 3G
Many have no signal at all yet
Hi-DPI

24px Source Sans Pro

Designing the Hi-DPI Web
Hi-DPI screens show existing artwork

Standard rendering @ 1:1 scale
Hi-DPI screens show existing artwork and **ALL ITS FLAWS**
Sample photo @ 1x
1280×486 = 193 KB

Sample photo @ 2x
2560×972 = 602 KB
Screen densities will continue to improve
Screen densities will continue to improve
Screen densities will continue to improve likely faster than our networks’ capacity to support them.
So what is to be done?
Make web content not as fixed PAGES, but more like USER INTERFACE
What we deliver is not the rendered work, but INSTRUCTIONS for rendering the work.
We can build the web of the future by giving devices BETTER INSTRUCTIONS
RESPONSIVE web design
Font hinting has been the source of countless headaches for type designers and users. Meanwhile, some of the most fundamental and important elements of typography still can’t be addressed with the web of today. Rather than being seen as a tedious chore whose demise will be celebrated, hinting might actually provide the essentials for truly responsive design, and vastly expand the possibilities of digital typography for designers, publishers, and readers.

**The fundamentals of hinting**

Type and web designers have long known that digital fonts often lack the rendering quality of their print equivalents. For example, the computer’s algorithms for rendering digital fonts can’t tell that a capital A is similar to a lowercase a; nor can they distinguish between a lowercase b and a lowercase d. This produces jagged, blocky letters, with angular Bézier curves around according to contextual conditions, such as the font’s rendering size. Though it’s now associated with type on screens, hinting was first used in the 1980s to improve rendering on low-resolution printers.

http://j.mp/nick-sherman
Adaptation for screen width
Adaptation for screen density

Type study: Hi-DPI web typography

May 1, 2013

Our digital world is often a textual world. We take in information via news sites, blogs, and e-books. We communicate with our friends and co-workers via email, chat, Twitter, or Facebook. Some of us even use text to interact with the computers themselves via terminals and source code.

Most of our time using computers, smartphones, and tablets is spent reading and writing, and reading is one way the digital world becomes physical. Our eyes are physical organs that can get tired—especially if the text we spend hours looking at is rendered poorly. Because we read so much when looking at screens, it's vitally important that the text before us is as readable as possible.

Hi-DPI displays can be a huge boon to readability. At first, high-resolution text can seem like a luxury — after all, modern operating systems are generally capable of producing good-looking text. But even though anti-aliased text on regular displays is much better than what came before, it's still far more pixelated and "fuzzy" than print—and even the best, most screen-optimized text can strain the eyes over a long day of reading. In apps with hi-DPI support, text is rendered with less anti-aliasing (that is, less pixel "fuzz") so letterforms are crisper and easier for the eye to distinguish. And in apps or on devices with this support turned on, you get all of this great, text-specific improvement without sacrificing overall legibility or performance on regular displays.

Get the latest news, tips, and how-tos on web typography from Typekit: http://j.mp/hidpitype
Proportion over pixels

Responsive Web Design
by ETHAN MARCOTTE · May 25, 2010
Published in CSS, Layout & Grids, Mobile/Multidevice, Responsive Design, Interaction Design · 103 Comments

“The control which designers know in the print medium, and often desire in the web medium, is simply a function of the limitation of the printed page. We should embrace the fact that the web doesn’t have the same constraints, and design for this flexibility. But first, we must ‘accept the ebb and flow of things.’”

—John Allsopp, “A Dao of Web Design”

The English architect Christopher Wren once quipped that his chosen field “aims for Eternity,” and there’s something appealing about that formula: Unlike the web, which often feels like aiming for next week, architecture is a discipline very much defined by permanence. A building’s foundation defines its footprint, which defines its frame, which shapes the facade. Each phase of the architectural process is more immutable, more unchanging than the last. Creative decisions quite literally shape a physical space, defined by walls, columns, and the proportions of the building itself. The web, on the other hand, is a system of layers, in which the visual appearance of the page can be radically altered through scripting, style sheets, and user behavior.

In this context, it is not possible to achieve the same kind of ‘snapshot’ design that we see in print media. When printed media is laid out on a page, all the elements are defined at once. The designer’s decision is final. The print medium is a document or a book. Size, layout, and proportions are set in stone. The web is a tool. It is meant to adapt to any screen, to be both a tool and a document. It is meant to be malleable. It is meant to be responsive.
Type study: Sizing the legible letter

November 9, 2011

Type study is an ongoing series of guest posts about typography on the web. In this article, Ethan Marcotte dishes up advice on font size.

Yes, it’s true. This is a blog entry about sizing text for the web.

...look, I know you’re still out there. I can hear you breathing.

Sure, sizing text isn’t the most glamorous topic. What’s more, it can get downright contentious, with camps forming around their favorite units of measurement. The truth is, each approach has its own unique strengths and limitations. So below, let’s dive into a few popular methods, discuss them with a bit of equanimity, and wrap up this little essay with a better understanding of our options for font-size.
ADAPTIVE content
In different contexts, display alternate content

NPR.org, May 15, 2013 · While looking for the source of a leak, federal investigators obtained phone records of Associated Press reporters and editors. There's been bipartisan outrage over what many see as government overreach. The attorney general tells NPR "I'm not sure" how many such seizures he's signed off on.

From 'Morning Edition': Attorney Gen. Eric Holder talks with NPR's Carrie Johnson

As his Justice Department faces bipartisan outrage for searching phone records of Associated Press reporters and editors, Attorney Gen. Eric Holder says he is not sure how many such seizures he's signed off on.

Read More ... ( 3736 bytes )
CONTENT STRATEGY FOR MOBILE

by KAREN MCGRADE
Designing for use requires TESTING
These are not problems, but rather OPPORTUNITIES
By embracing the web’s digital nature we can overcome physical constraints and spread INFORMATION EVERYWHERE
Thank you.

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