

Web typography today

JUSTIN SLACK

START WITH A QUOTE

“Web Design is
95%
Typography”

Oliver Reichenstein, 2006

TYPOGRAPHY - WHAT THE HELL IS IT?

ty · pog · ra · phy
tī'pägrəfē

Noun

1. The art or process of setting and arranging types and printing from them
2. The style and appearance of printed matter

Typography is hard - an art
Vast array of terms to understand
Thousands of typefaces
Many more thousand variations

Much of the web is about reading

Good typography enhances that experience

"Designers will benefit from [approaching] their work now and again as being written rather than assembled."

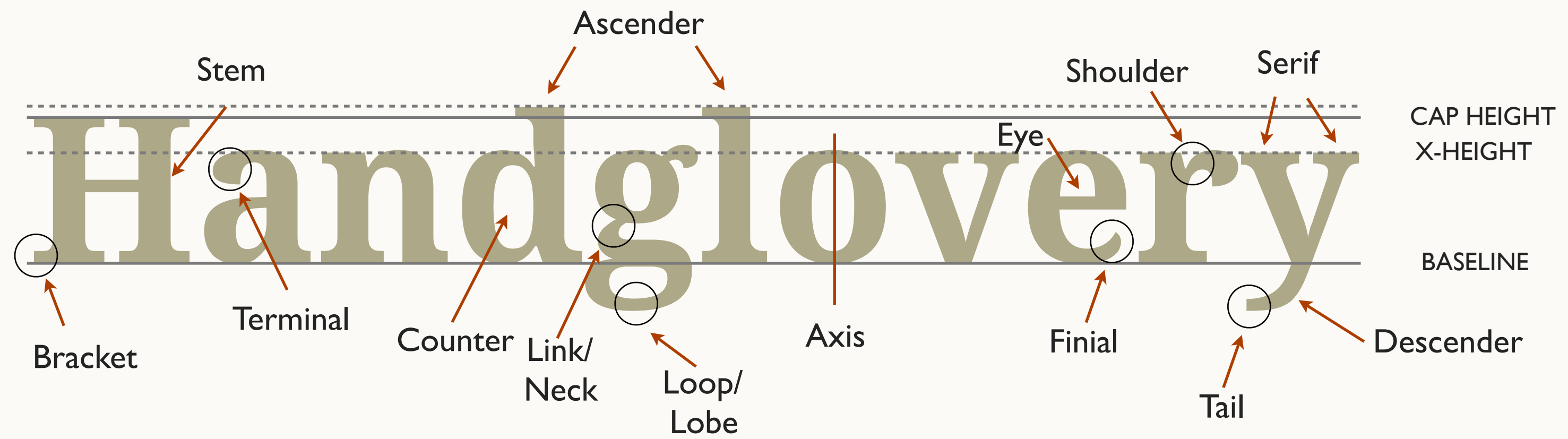
Dean Allen, 'Reading Design', A List Apart, 2001

WHERE DO WE START?

dizzying array of typographic terms

baseline, cap height, condensed, descender, drop cap, em, em space, em quad,
hanging indent, kerning, discretionary ligature, swash, smallcaps, stylistic sets,
x-height, tracking, bowl, ascender, accents, alternates, counter, diacritics,
hinting, leading, terminals, lining figures

ANATOMY OF A TYPEFACE



ALL SCREEN FONTS WERE BITMAPS



FONT FORMATS

the font wars

Adobe - Type 1 (Postscript)

Apple Advanced Typography (AAT or GX typography)

True Type - Microsoft (and Apple)

Open Type (™Microsoft)

WHO WON?

whopetrytype?

OpenType offers an accessible and advanced typographic toolset.
It improves on PostScript and TrueType in a number of ways:

- One style in one file

- While Postscript is limited to 256 characters in a file a single

- OpenType file can contain 65,535 characters or glyphs

- This allows for extensive language support as well as space
for advanced typographic features

TRUETYPE OPENTYPE COMPARISON

FF META

POSTSCRIPT	OPENTYPE
4 styles	4 styles
360 files	4 files
23.6 mb	676 kb

WHY SHOULD WE CARE?

@font-face

WEB SAFE FONTS

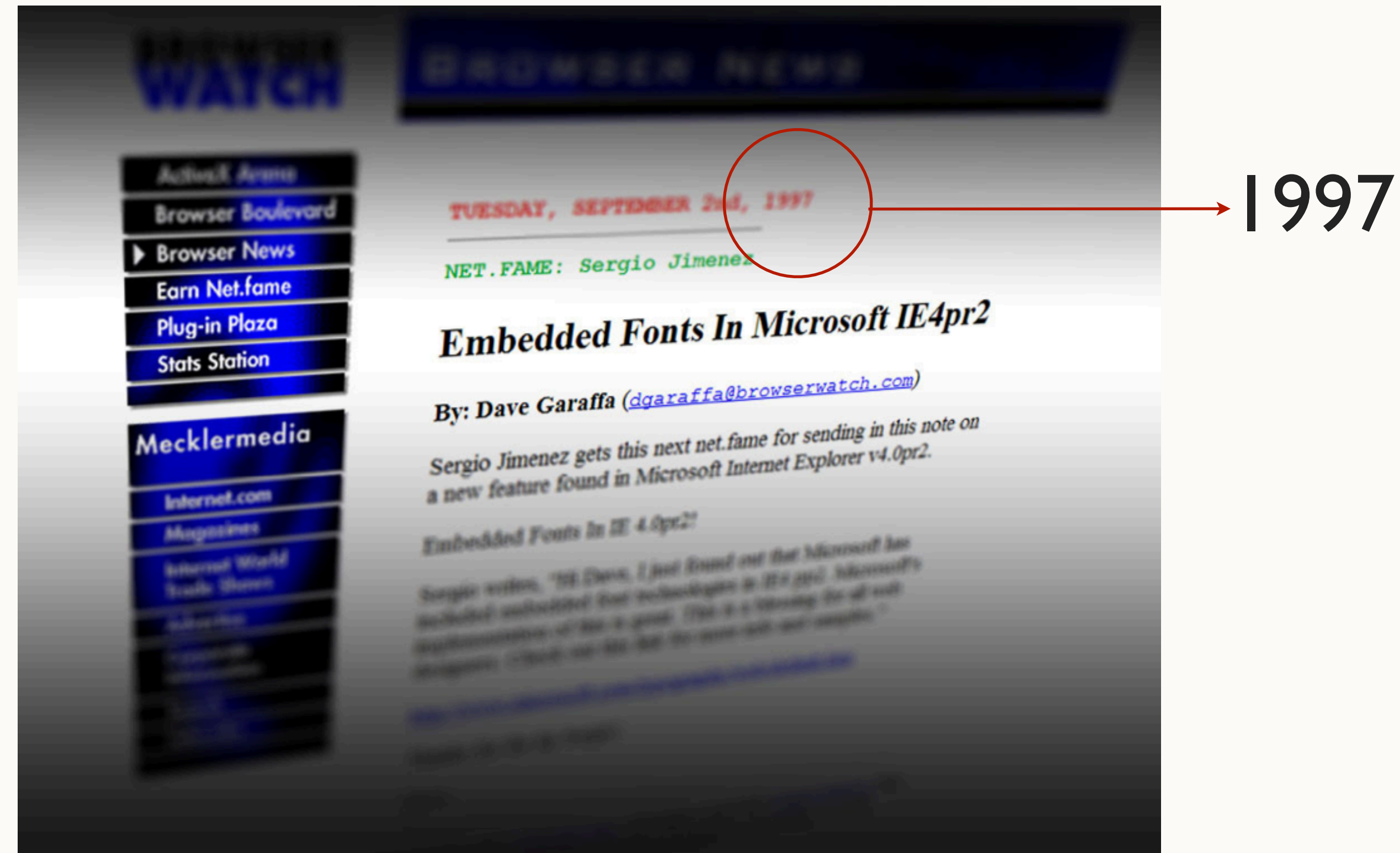
~~Arial
Helvetica
Georgia
Courier
Times New Roman~~

@font-face ORIGINS AND SUPPORT

The first browser to support embedded type was Netscape Navigator 4 in 1994

```
<head>  
  <link rel="FONTDEF" src="myfont.pfr">  
</head>  
  
<body>  
  <font face="myfont">Type</font>  
</body>
```

@font-face ORIGINS AND SUPPORT



Source: Jake Archibald

IE

Internet Explorer has supported font embedding via @fontface since 1997.

```
@font-face {  
  font-family: 'myfont';  
  src: url('myfont.eot');  
}
```

two technologies

Microsoft Typography

.eot via @fontface

Bitstream TrueDoc™

.pfr font file via (seriously
invalid)

LINK REL=fontdef

SRC="myfont.pfr"

problems (we have them)

Microsoft Typography

.eot is proprietary and requires a browser plugin to render in Netscape

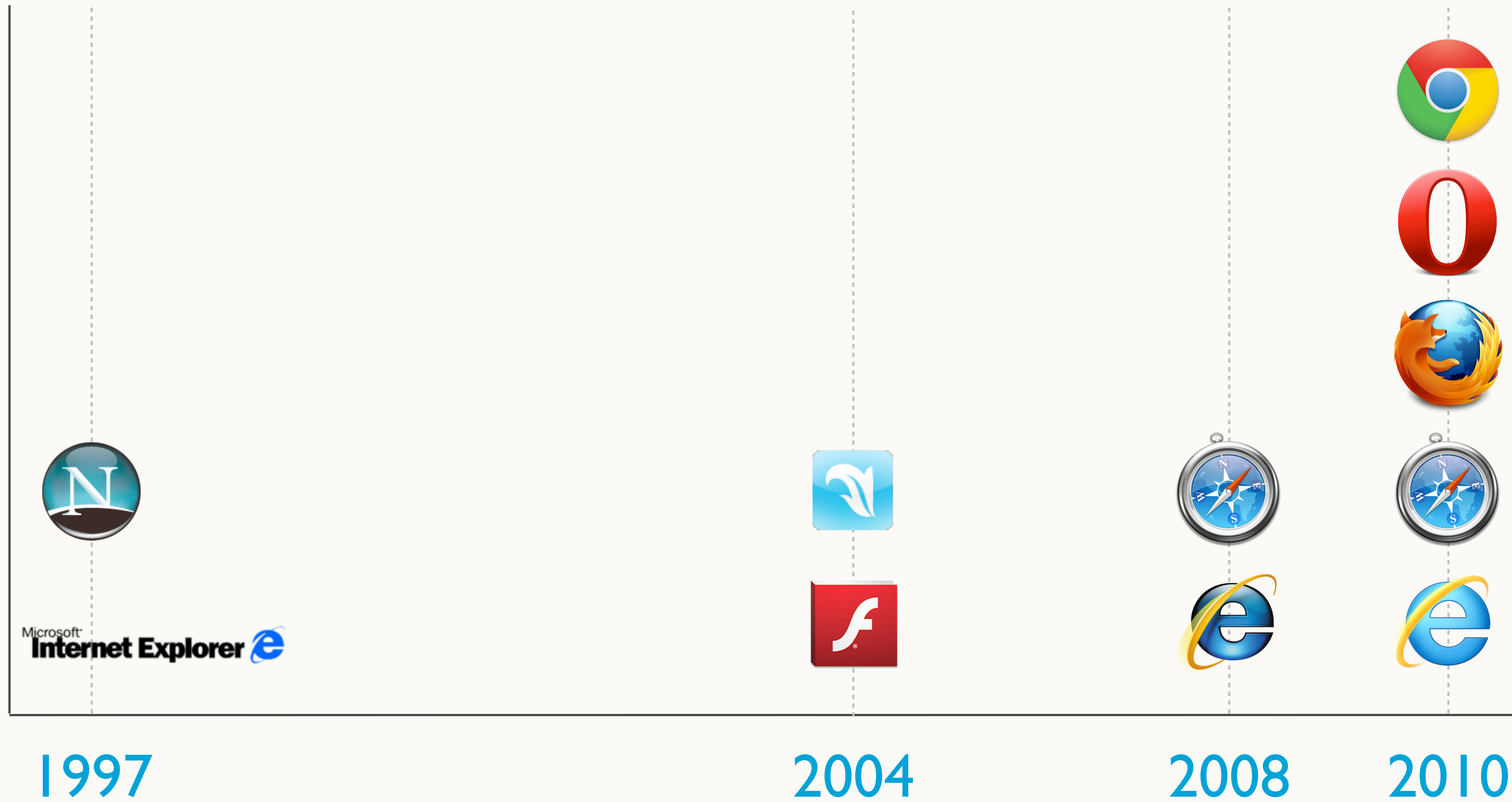
Bitstream TrueDoc(TM)

.pfr font requires an active-x control to run in IE

Manual refresh required after activating active-x

Netscape 6 = open source

@FONTFACE BROWSER SUPPORT



Four font file types

EOT	Proprietary Microsoft format - rejected by W3C
SVG	A simple means of embedding glyph information for rendering
TTF/OTF	Standard font format
WOFF	Developed specifically for embedding fonts in web pages

CURRENT STANDARD

WOFF

WOFF uses a compressed version of the same table-based sfnt structure used by TrueType, OpenType, and Open Font Format, but adds metadata and private-use data structures, including predefined fields allowing foundries and vendors to provide license information if desired.

EMERGING STANDARD

WOFF advantages

Font data is compressed. Sites using WOFF will use less bandwidth and will load faster than if they used equivalent uncompressed TrueType or OpenType files.

Many font vendors that are unwilling to license their TrueType or OpenType format fonts for use on the web will license WOFF format fonts.

Both proprietary and free-software browser vendors support the WOFF format.

WOFF SUPPORT

current browsers

IE 9/10/11	FIREFOX	CHROME	SAFARI	OPERA	EDGE
Yes	Yes	Yes	Yes	Yes	Yes

WOFF SUPPORT

mobile browsers

IOS	BLACKBERRY	OPERA MOBILE	CHROME	FIREFOX (Android)	ANDROID BROWSER	OPERA MINI*
Yes (5)	Yes (7)	Yes (10)	Yes (27)	Yes (22)	Yes (4.4)	No (7)

* no @font-face support

WOFF2 SUPPORT

current browsers

IE 9/10/11	FIREFOX	CHROME	SAFARI	OPERA	EDGE
No	Yes (49)	Yes (49)	Yes* (10)	Yes (41)	Yes (14)

* Supported only on Safari for Mac OS Sierra, not El Capitan & older.

WOFF2 SUPPORT

mobile browsers

IOS	BLACKBERRY	OPERA MOBILE	CHROME	FIREFOX (Android)	ANDROID BROWSER	OPERA MINI*
Yes (10.1)	No	Yes (37)	Yes (54)	Yes (50)	Yes (53)	No (7)

* no @font-face support

hello rich typography

Support widely expanded character sets and layout features which provide rich linguistic support and advanced typographic control

Using one font file only for its entire glyph, metric and bitmap data, OpenType fonts simplify font management.

hello rich typography

Based on the Unicode Standard, a multi-byte character encoding that covers nearly all the world's languages.

Includes non-standard glyphs, such as old-style figures, tabular figures, small capitals, fractions, swashes, superiors, inferiors, titling letters, contextual and stylistic alternates, a full range of ligatures, symbols and ornaments.

CSS fonts module level three

Working draft updated 12 February 2013

Introduces Font Feature Properties

Expands the font-variant property for CSS3

It now functions as a shorthand for a set of properties that provide control over stylistic font features

CAVEATS

potential pitfalls

Just because we have lots of typefaces ...
more fonts does not mean better typography

Many current fonts are not optimised for the web

Incomplete character sets, sub-optimal line heights, poor kerning

*The Elements
of Typographic Style*
version 3.1
Robert Bringhurst

ISBN: 0-88179-206-3

Thanks
for
listening

Questions?

RESOURCES

Web Design is 95% Typography <http://ia.net/blog/the-web-is-all-about-typography-period/>

Reading Design <http://alistapart.com/article/readingdesign>

What is Open Type? <http://www.fontshop.com/opentype/>

In your @fontface <http://www.slideshare.net/jaffathecake/in-your-fontface>

CSS3 font tester <http://clagnut.com/sandbox/css3/>

Official specification (latest draft) <http://dev.w3.org/csswg/css-fonts/>