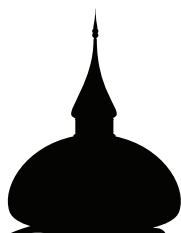




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# DESIGNEDGE CANADA

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## Best practices for type on the web

Become a better web designer by following these typographic and accessibility tips **page 10**

# Webography rules

Web typography is not an oxymoron. A growing number of designers are championing strong typographic and accessibility principles online

**GIVING** up control is hard to do. But without the ability to standardize every web user's operating system, browser window size, screen resolution, colour settings, browser version, type selection and eyesight, web designers need to let go.

"It's a very disturbing idea that the user is part of the design team," says Ottawa-based designer David Berman. But rather than try to resist the fluidity of the medium, he says, embrace it as an opportunity to take advantage of what can never be done in print.

West Coast type designer John Hudson agrees. "The Internet is a dynamic medium in a way that a page of paper isn't... You have to acknowledge that it's a dynamic medium and design for [it]."

However, dealing with the web's shortcomings should not be at the expense of web typography and accessibility. A growing number of designers are heralding the importance of type on the web, an area where they think designers should take back some control.

### Typographic principles on the web

There are conflicting opinions about type on the web. Some designers, such as Michael Ortelli of Bold Internet Solutions in Toronto, feel the finer points of typography are not something web designers should spend a lot of time on because sites are constantly changing and virtually no two browsers are the same.

"Personally I think the whole concept of trying to be so worried about the minutiae of line breaks in the web world really is not one worth pursuing," says Ortelli, since everyone sees a website slightly differently

Richard Rutter, production director at Clearleft in Brighton, England, feels so strongly about the lack of typographical detail online that he launched Webtypography.net. It's a work in progress that takes Robert Bringhurst's magnum opus, *The Elements of Typographical Style*, and applies it to the web, explaining how to accomplish each principle using techniques available in HTML and CSS.

"My opinion is that there is not enough detail or thought put into the typographical side of stuff on the web," says Rutter.

He's not alone. Last fall, Oliver Reichenstein of Information Architects in Japan wrote a blog entry titled *Web Design is 95% Typography*. "Ninety-five percent of the information on the web is written language. It is only logical to say that a web designer should get good training in the main discipline of shaping written information, in other words, typography," wrote Reichenstein. His article received a barrage of commentary from designers, some applauding and others disputing his claim.

Both Reichenstein and Rutter agree that excuses for the absence of typographical discipline online – such as low screen resolution and rendering issues on different platforms and browsers – are getting old. "I think those problems are behind us now so people can technically put the effort in and I think it is worth it and it does pay dividends," says Rutter.

By effort he means implementing the typographical training you learned in print

## Best practice

Adhere to strong typographical discipline on the web. Use proper quote marks, apostrophes and dashes as opposed to prime (feet and inch) marks and hyphens

depending on a myriad of factors such as browser version, screen resolution, and window size.

However, there are a small but increasing number of designers who feel more attention should be paid to typography on the web.

– paying attention to line heights, line endings, margins, leading, kerning and proper characters – and applying it appropriately to the web. Use proper quote marks and apostrophes as opposed to prime (feet and inch) marks, says Rutter. Know when to use dashes instead of hyphens. And don't rely on a browser's default margins and paddings. "I believe that designers and developers should be pushing for that sort of detail now." (For more of Rutter's web typography tips see page 5.)

The typographical principles for both mediums are generally the same, but the application differs. Designers need to recognize how type for the web is different than type for print, says Stephen Coles of the FontShop in San Francisco. For one, font choices are limited. Various platforms render type differently. Type on the web should be resizable. People scan web text much quicker than print, and they also read differently online (not up and down with multiple columns).

When designers are not familiar with these distinctions, says Coles, common errors in online typography occur: line lengths are too long, line spacing is too narrow, contrast is too low (i.e. grey text on a grey background), they neglect to test on various browsers and platforms, and use fonts that are not designed and engineered for the screen.

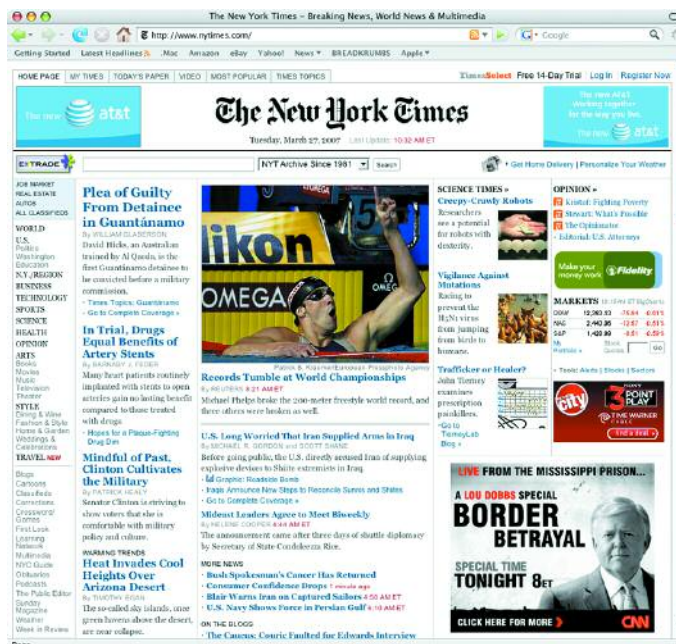
And to confuse things even further, when it comes to web design, there is not always one right answer. "There are lots of arguments about whether you should have line lengths fixed in pixels or whether they should be put in a liquid layout so it's proportional to the size of the window or proportional to the size of the text type," says Rutter. (See Web Throws on this page for a list of web typography resources online.)

But why make the extra effort?

"Typography on the web is important for the same reasons typography is important anywhere," says Dave Shea of Bright Creative in Vancouver. Good typographical practices improve legibility, readability, and clarity. And if not for professional pride, says Rutter, then know that print-resolution displays are imminent (200dpi is now available). They will not be so forgiving, he says, to those who have not been paying close attention to their text.

### Selecting type for the web

When it comes to choosing type, it's recommended that you use popular screen fonts available on most people's computers. "Due to the multiple operating systems



floating around out there, it's wise to use those fonts generally available cross-platform," says Dave Shea. Unfortunately, it's a rather small list, including Verdana (released in 1996) and Georgia (1993), which were designed by Matthew Carter specifically for use on screen.

Carter explains to *Design Edge Canada* that more consideration was given to the spacing of these typefaces than to previous fonts that were adapted from print. "The one advantage that I think I had in making this primarily for the screen was that I could figure out the spacing so that it could be as regular as possible on the screen. I didn't have to match the spacing of a preexisting printer font," says Carter.

While some designers would prefer not to use these ubiquitous fonts, others warn that custom typefaces are often not worth the headache. Shea, who prefers to use CSS-formatted type for navigation, headings, and other user-interface elements, says "the overhead of creating images and the potential accessibility problems sometimes feel like they outweigh the benefits of using Avenir over Arial... I can't believe I said that."

Rutter agrees. "Arial gets slighted continually but as a screen typeface, it's really rather good in my opinion."

The good news is Microsoft is now offering more selection. Its new family of ClearType fonts, which ships with Windows Vista and Office 2007, was designed to optimize Microsoft's ClearType rendering technology, developed to

Use text fonts that were designed and engineered for the screen. *The New York Times* uses Imperial for its print edition but on its website it uses Georgia

**WEB THROWS**

<http://webtypography.net>  
(Richard Rutter's online type resource)

<http://alistapart.com>  
(Articles on web design and typography)

[www.digital-web.com/topics/typography](http://www.digital-web.com/topics/typography)  
(More articles on web typography)

<http://24ways.org>  
(Tips for improving your web design)

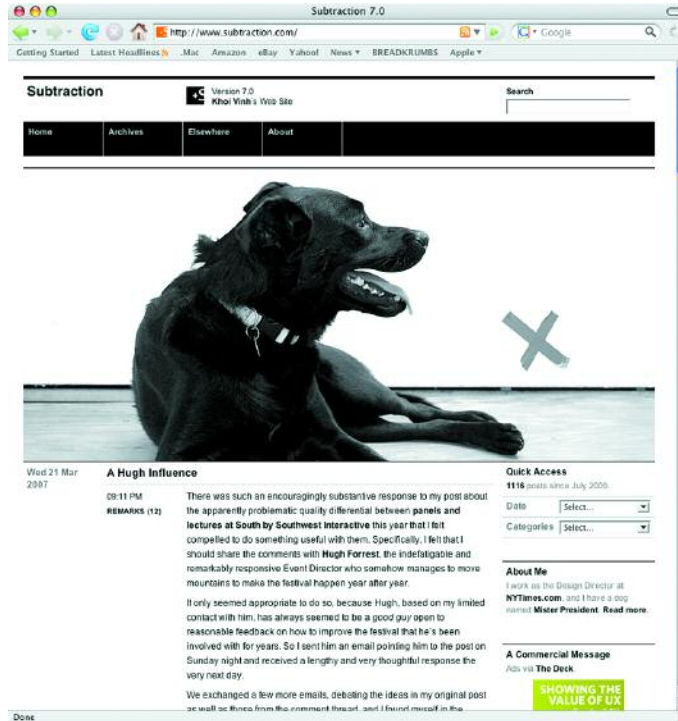
[www.microsoft.com/typography](http://www.microsoft.com/typography)  
(Learn more about ClearType)

<http://markboulton.co.uk/articles>  
(Five Simple Steps to Better Typography)

[www.informationarchitects.jp](http://www.informationarchitects.jp)  
(Web Design is 95% Typography 1 and 2)

[www.mikeindustries.com/sifr](http://www.mikeindustries.com/sifr)  
(Scalable Inman Flash Replacement)

[www.w3.org/TR/WCAG](http://www.w3.org/TR/WCAG)  
(WAI's Web Content Accessibility Guidelines)



**NYTimes.com**  
**design director**  
**Khoi Vinh treats**  
**text as a user**  
**interface on**  
**his website**  
**Subtraction.com**

improve readability on LCD screens. It works by accessing the individual vertical colour stripe elements in every pixel of an LCD monitor. ClearType can now display features of text as small as a fraction of a pixel in width. This extra resolution increases the sharpness of text, making it much easier to read.

“ClearType is a new kind of font smoothing,” explains John Hudson of Gabriola Island, B.C., co-founder of Tiro Typeworks and designer of ClearType font Constantia.

## Best practice

Use colour as a secondary cue, not a primary one because someone who is blind or colour deficient cannot detect it as a prompt, e.g., “fill out the spaces marked in red”

“[It] preserves the density of the letterforms so that they remain good black letterforms against a light-coloured background.”

When you have to use a custom font, Bright Creative’s Dave Shea recommends the following methods:

The most accurate and reliable way is to embed the type in images. This, however,

requires more set-up, increases download times, can be difficult to scale, and can be potentially problematic for search engines, and users who rely on assistive technology to read websites.

Another option is sIFR, Scalable Inman Flash Replacement, which is essentially a set of scripts that allows the Flash engine to generate headlines using any font, regardless of whether or not users have it installed on their machines. It’s easier to set-up than locking type in images and it doesn’t sacrifice accessibility, search engine friendliness, or markup semantics. But it also doesn’t allow for control over kerning, anti-aliasing (“smoothing” type) or type effects.

When it comes to selecting type for the web, know that all fonts are not created equal. What makes a good screen font? Design characteristics and technical quality, according to FontShop’s Stephen Coles. He advises using typefaces with open counters and square forms and avoiding fonts that are very light, heavy or decorative. (For web type trends see page 9.) “But even a typeface with the most well-drawn outlines won’t look good in low-res situations if it’s not properly hinted,” says Coles. Hinting, or instructing, is a method of specifying how digital fonts should display at small sizes on screen by providing instructions in the font file that define which pixels are turned on when producing bitmap images. “That’s why sticking with a reputable foundry with a good production process is important.”

### Making accessible websites

“Designers need to understand why web accessibility is important,” says designer David Berman, who has worked with teams to create sites for the federal government that are standards-compliant. “We’re not talking about designing for one percent of the population, we’re talking about a population where the majority of people in our society have some sort of difficulty or disability or will have before their lives are over. When we design for the extremes we are actually helping out everyone.”

The World Wide Web Consortium’s (W3C) Web Accessibility Initiative (WAI) has developed Web Content Accessibility Guidelines (WCAG), which are the de facto international standards for web accessibility. Here are some of its guiding principles:

Use the ALT attribute to describe visuals and text graphics so that web assistance technologies can read the information.

Don’t rely on colour alone. Someone who is blind or colour deficient cannot

detect coloured text as a visual cue, e.g., “fill out the spaces marked in red.” Therefore use colour as a secondary prompt, rather than a primary one. Berman, therefore, suggests using other ways to emphasize the text you want to stand out. “For a blind person, that might mean the emphasized portions of the form are read louder and for a colour deficient person, those areas are italicized or bolded.”

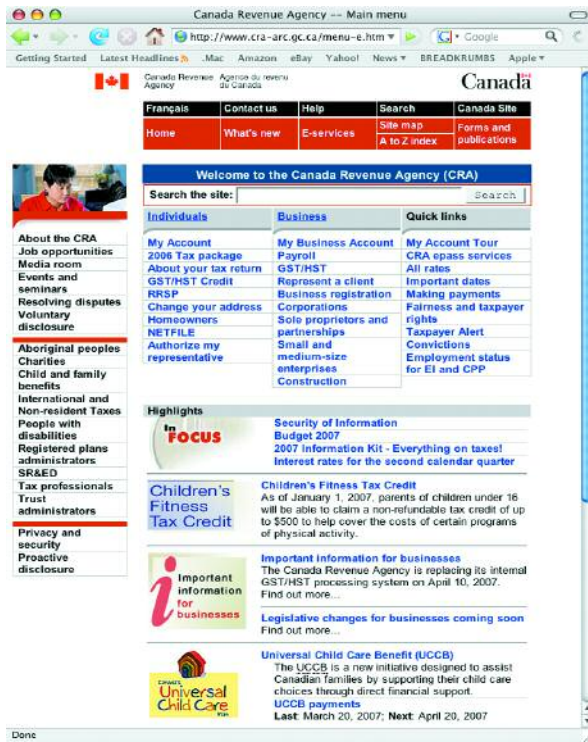
Web text should also be scalable. Represent type size with relative units, such as em or %. This allows a user to increase or decrease the size of the text relative to the browser’s default settings, since “normal” size can be different for every user and browser. Test it to make sure that, for instance, elements on the page don’t overlap when a user increases the font size.

“Test it in everything you got,” says web accessibility expert Joe Clark, who runs a web standards club in Toronto, Webstandards.TO. “Test it in all your Windows browsers, all your Mac browsers, test on Linux, test on your ‘crackberry,’ test it with no CSS, see if you can still read it, do a print style sheet and make sure that works.” You may be surprised at what you find. Pixel-sized (px unit) text, for instance, can be resized in every browser except Internet Explorer 6 and 7 on Windows because of a bug in the software.

Building an accessible site is not a trade-off to creating one with an intriguing design, says Berman. The two are not mutually exclusive. “Sometimes these accessibility issues may seem like splitting hairs,” he says, “but the small things can have huge impacts.” Being standards-compliant not only makes good moral and ethical sense, he says, it also makes good business sense to embrace these practices.

According to Berman, the Canada Revenue Agency saves hundreds of thousands of dollars with its standards-compliant site ([www.cra-arc.gc.ca](http://www.cra-arc.gc.ca)) since it’s much cheaper for the agency to serve customers online (under 10¢ per incident) than by phone (over \$20 per call).

The alternative to creating an accessible



**The Canada Revenue Agency saves hundreds of thousands of dollars with its accessible site**

site can be even more costly. In February 2006, U.S. retailer Target was hit with a class action lawsuit organized by the National Federation of the Blind, which alleges that Target’s website, [www.target.com](http://www.target.com), is inaccessible to the blind. Last September, a U.S. federal judge ruled that the lawsuit can move forward, setting a legal precedent in support of web accessibility.

**ONLINE EXTRA**

Use CSS for layout and style where possible

For more WAI quick tips on how to make accessible websites visit [www.designedgecanada.com](http://www.designedgecanada.com)

The foregoing tips, suggestions and best practices are opinions held by some designers, many of whom are experts in the field. What do you think? To continue this discussion on web design and online typography, we encourage you to visit [www.designedgecanada.com](http://www.designedgecanada.com) to express your opinions, comments, and grievances on the subject.

- Ann Meredith Brown