

Type Basics for the Web

by Ilene Strizver

Designers need to understand the fundamentals of both type and web functionality, since they go hand in hand for developing and maintaining strong type online.

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Type on the web: What exactly does this mean? Most traditional definitions of typography refer to the style, arrangement and appearance of type on the printed page. But more modern definitions have been expanded to include other uses of typography. One of the most widespread uses is type in electronic media—namely the web. We all know that type on the web is different from printed matter, but how and why it differs, and how this affects the ways in which a website is designed—as well as viewed—is somewhat mysterious and often misunderstood. It is actually not as complex as it might seem, once one understands the basic principles.

CHARACTERISTICS OF WEB TYPOGRAPHY

Although the basic principles of good typography in print also apply to the web, these principles often have to be reinterpreted due to the ways in which type on the web varies from how type appears in print. Type on the web differs in appearance, behav-

ior and application, all of which must be understood in order to create good web typography, and thus, a strong and effective website.

The primary difference between the two mediums is that the appearance of type on the web is not fixed, predictable and controllable, as it is in print; to the contrary, the appearance and characteristics of type on the web vary from user to user based on the viewer's operating system, browser, installed fonts and screen resolution. These are the primary factors that vary and need to be taken into consideration when designing a website:

Font style

Think you have total control over what font viewers see when they look at a site? Think again! In order for the fonts used on a website to be viewed by every visitor, they have to be installed on the viewer's computer; if they aren't, the font will default to something else on the user's system—which can have unexpected and often undesirable results. For this reason, it is

best to stick to *web-safe fonts* in order to maintain better control over what your viewers see. These are fonts that are found on most computers. Some have been designed specifically for the screen.

Type size

Although the designer can choose a fixed point size when designing for the web, what the viewer actually sees varies from computer to computer depending on the following elements: platform and subsequent operating system (Mac or Windows), browser (Safari, Explorer, Firefox, etc.) and resolution. Default screen resolutions and browser point sizes vary from user to user: Although the viewer can change these defaults, the web designer has no control over these settings, making the selection of type size somewhat of a guessing game.

Another factor to take into consideration is that Mac and Windows operating systems can display type differently. In general, type displayed at a given point size on Windows browsers can look 10 to 20 percent larger than on Macs, especially on some older browsers. This is an important consideration when designing for the web, as this difference can have a big impact on your page layout.

Column width/line length

When designing a website, column width can be a fixed width in pixels or a variable width in percentage. In either case, a very wide text-column width, especially one that extends across the screen, reduces readability greatly. It's common for designers to control the line length of text by creating HTML tables that are specified in pixels, although purists would argue that you should use CSS (Cascading Style Sheets) to fix line lengths. And though the actual character count of a line can vary on the web, keep the length in the range of 60 to 70 characters per line (or 350 to 500 pixels) for maximum readability, and avoid type that goes across the total width of the page.

Line breaks

Unlike in print, there is no control over where a line will break on the web, due again to the font size and style variances from user to user. Another contrib-

This quote displayed on the web via Safari, Internet Explorer and Firefox illustrates how type size, as well as line breaks, can vary from browser to browser. Quotation by Mike Davidson.

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uting factor is that current browsers don't support hyphenation. Because of this, the line breaks and resulting column rag are at best unpredictable.

Tip: When designing a website, do not make manual breaks with soft returns as one does in print to control the rags, or some users will wind up with very short lines.

Column depth

Column depths vary on the web, unlike in print where you have total control over type style and size, column width and line breaks. Because of this, it can be difficult in some layouts to align text to related images in adjacent running columns unless they appear at the top of a column and/or the beginning of the text.

If you are willing to live with possible gaps within the text and between paragraphs above, it is possible to force an alignment in adjacent columns by placing the text and image in neighboring cells in a table. A possible solution is to place images within the flow of the text as *in-line elements* so the text wraps around them; they can then hold their vertical position in relation to the paragraph.

Color

While you might think color is one element you have control over, this is not completely true. Color varies from computer to computer, depending on the viewer's browser, brand and type of monitor, how the monitor is calibrated, and the color profile selected. While you can adjust some of these options on *your* monitor, you still can't control what others see. And while you are no longer limited to web-safe colors as with older computers, try to aim for enough contrast between the type and its background color to allow for color variations from viewer to viewer that might reduce readability. This is especially true with longer passages of text at small sizes.

Web-safe fonts

The primary limitation of web typography—and probably the most frustrating one—is related to font usage. As noted earlier, if the fonts used on a website are not installed on the viewer's computer, the site will default to another font on the user's system. And after all, you wouldn't want a random font substituted for your chosen font on a printed piece, would you? That is the reason why it is best to stick to *web-safe fonts* in order to maintain better control over what your viewers see.

The following is a list of reliable, web-safe fonts common to most Mac and PC browsers:

Sans serifs

Verdana: Considered the most legible of the five choices, this sans serif was created by Matthew Carter for Microsoft. Carter specifically designed Verdana with a tall x-height, comfortable width and rather open letterspacing to be readable at small sizes onscreen.

Trebuchet MS: This sans serif retains clarity and readability at small sizes on the web. It's slightly narrower than Verdana, allowing more copy to fit in the same space. Its curved-stroke endings and unusual lowercase *g* give it a bit more personality than Verdana.

Arial: Although not specifically designed for the web, Arial is a fairly readable sans which works in print and on the web. It's similar to Helvetica in both width and spacing, but with slight character modification.

Serifs

Georgia: Matthew Carter designed this Times alternative for the web. With its open letterforms and spacing, Georgia is crisp, clean and easy to read on the web, especially at smaller sizes.

Times New Roman: Designed for print, this commonly used typeface is hard to read on the web, especially at smaller sizes. If you like Times, try Georgia instead.

Symbol fonts

Although not considered 100-percent web-safe, these symbol fonts are found in most systems, although occasionally with a different name. When a font menu listing in an application is displayed in the actual font, these font names show up as symbols.

Webdings: This symbol font was developed by Microsoft in 1997 and contains 230 symbols, icons and pictograms.

Wingdings: 255 more symbols from Microsoft, released in 1990.

SMART PUNCTUATION ON THE WEB

In print, the use of typographically correct punctuation, including "smart" quotes and apostrophes (also known as *curly* or *typographer's quotes*), as well as en and em dashes, is the accepted practice in professional typography. In web design, these practices are often absent, or just tossed by the wayside—either by web developers with little typographic knowledge

Internet Explorer

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Color can vary from viewer to viewer and browser to browser, as illustrated in this example taken from Internet Explorer and Firefox, which happen to be on the same computer—mine! Even slight differences in the colors of the type—as well as the background—can affect contrast and resulting readability.

Firefox

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The differences in all five web-safe fonts are obvious in this quotation by Clement Mok (below).

Web-safe fonts

Verdana

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Trebuchet

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Arial

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Georgia

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Times New Roman

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Web design software

Adobe Dreamweaver, Mac & Windows web-development tool: www.adobe.com/products/dreamweaver

Adobe GoLive, Mac & Windows web-development tool: www.adobe.com/products/golive

Microsoft Expression Web, Windows-only web-development tool: www.microsoft.com/Expression/products/overview.aspx

Adobe Flash, Mac & Windows interactive and animation authoring tool: www.adobe.com/products/flash

Informative & fun URLs

www.alistapart.com

www.csstype.com

typetester.maratz.com

webtypography.net

ilovetypography.com/2007/09/19/15-excellent-examples-of-web-typography

www.informationarchitects.jp/the-web-is-all-about-typography-period

webstyleguide.com

www.modernlifeisrubbish.co.uk

or designers who aren't aware these practices can be incorporated into websites. Not only *can* they be used on the web, they *should* be, especially for design-related sites, which should strive for the highest typographic standards possible.

The first step to achieving this goal is to make sure your original copy contains typographically correct punctuation. Unlike many page-layout applications that have features to correct 'dumb' typography, web-development tools are not typically type-savvy and need to be fed typographically correct copy to accurately code these Special Characters (as they are known in HTML). When copy is hand-coded, this is even more important and should probably be called out in advance to the webmaster (if it isn't you).

Common character codes

While there are several ways to code these characters, these are the most reliable and should display correctly for most current browsers:

Left double-quotation mark	“
Right double-quotation mark	”
Left single-quotation mark	‘
Right single-quotation mark/apostrophe	’
En dash	–
Em dash	—

CASCADING STYLE SHEETS

The Cascading Style Sheets (CSS) language is used to define specific characteristics of web documents—including elements such as font style, size, spacing, alignment, emphasis and color. Much like style sheets in page layout software, CSS is a time-saving feature that allows the designer to have more control over the stylistic preferences and appearance of web documents.

With CSS, it is possible to create a set of type specifications and apply them to a block of text or a whole site, and to alter those elements on a global basis. It is a way to keep content and type markup separate, as well as a way to have control over type that hasn't been provided for in basic HTML. CSS was a huge breakthrough in web design when it first appeared, and still is a great, time-saving feature worth learning and using if you are designing a site.

FONT EMBEDDING

If you've heard mention of font embedding on the web, you're probably intrigued about what it is and

how it is used. Font embedding is a technology most commonly associated with Adobe Flash, a web development tool used for making interactive type and animation. Flash allows you to control many elements, including font, color, size, placement, etc. The fonts used are embedded within that file, eliminating the necessity of using only web-safe fonts. Flash is fairly complicated to learn, and Flash animations take longer to load, so unless you are designing a website where this type of technology is desired, stick with web-safe fonts for best results.

TYPE AS GRAPHIC

If you want complete freedom to select the fonts you want for a typographic logo, heading or subhead, navigation bar or other font-specific images, the type can be converted into a graphic in the form of a .gif, .jpg or .png file. This gives you unlimited creativity and flexibility, allowing you to combine text with images, textures, patterns and numerous special effects that can be achieved with your software. Most websites have graphics as well as straight text to establish a specific look and identity, and to distinguish them from thousands of other websites.

If graphics are so great, then why not create an entire website from graphic images? Unfortunately, some websites do just that, but there are many reasons why this is not a good idea:

- Graphics are slow to load; the larger the files and the more there are, the longer it will take for the site to load. And don't forget: The slower the user's internet connection, the longer it will take to load.
- Search engines won't recognize a graphic (or Flash) as content with keywords as they do text, so an all-image site won't register any content or be as searchable for viewers looking for the site.
- Graphics aren't easily editable, so making corrections or updating a site is time-consuming.

While all this geek talk and technical information might seem a bit overwhelming to the novice web designer or the graphic designer whose foundation is in print, don't despair. It might seem like an ocean of unconquerable elements, but don't be afraid to stick your toe in. Proceed at your own pace, and before you know it, you'll be swimming with the sharks and having fun doing it. ☺

"Have no fear of perfection -- you'll never reach it."

--Salvador Dali

"Have no fear of perfection – you'll never reach it."

— Salvador Dali

The example at upper left shows the use of "dumb" punctuation as it commonly appears on the web. The dumb quotes and an apostrophe shown here are actually prime marks, and a double hyphen is used instead of en and em dashes. These

outdated typewriter conventions *can* and *should* be replaced with the proper typographic punctuation, as seen in the example at lower left. They need to be properly encoded: See section "Common character codes" on the previous page.



This website for Rishi Yoga (www.rishiyoga.com), designed by Teri Kahan (www.terikahan.com), uses graphics instead of web type to create a dramatic and decorative logo and navigation bar treatment.

Dos and Don'ts

Do:

- Use a line space between paragraphs for better readability, not an indent.
- Add a space before and after dashes to allow for more line-break choices. Without spaces, the web will read the entire phrase as one word, which with no hyphenation often results in unsightly deep rags.
- Use subheads to break up lengthy copy, which can be tiring to read.
- Choose text and background colors carefully for maximum readability under varying conditions.
- Check how your web pages look on as many browsers (on both Macs and PCs) as possible.
- Check the appearance of bolds and italics to make sure they stand out enough, as their appearance and emphasis potential can vary from font to font, size to size and monitor to monitor.
- Use the smallest file possible that still allows you to maintain sharpness, clarity and color when converting type to image.

Don't:

- Justify type on the web—the lack of hyphenation and variation in type size often creates unsightly rivers and holes in web type.
- Make manual line breaks or word breaks to adjust a rag as one does in print. Text flow is too unpredictable on the web.
- Make text columns too wide or too narrow, both of which can greatly reduce readability.
- Drop small text out of black or a color close in value, both of which can be difficult to read.
- Set a lot of text in all caps, which reduces readability.

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Justification

Avoid justification (upper), as varying type size and lack of hyphenation on the web often result in huge word spaces and rivers of white space in the text—all of which greatly reduces readability. While

a justified setting might look OK on one screen, it can change drastically for a viewer whose computer and browser display the type at a larger size. Stick to flush-left/rag-right type (lower) for best readability and predictable results.