

Trends in Web Typography

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Abstract

This study outlines different methods available to use in web design, aside from the sixteen web-safe fonts, and compares them to see which ways are more beneficial to the designing process.

These alternative methods provide a greater capacity to customize the design of a page.

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Introduction and Purpose of Study

A designer's control over the design of web pages has made great progress from where it started. Between cascading style sheets (CSS), JavaScript, and a myriad of other ways of customizing web pages, designers have almost as much control over web design as they do print design. Almost. The one area that has historically been lacking is control over typography.

Whereas print has an almost endless supply of typefaces to choose from, type selection for the web, until fairly recently, only had 16 web-safe fonts one could select. This is because the computer a website viewer was using had to have that exact font installed on that computer in order for it to display properly. Since most fonts are licensed, and thus can cost a fair amount of money to install, there are only a handful of typefaces that are almost guaranteed to be installed on most computer standard operating systems. If a designer wanted to use a particular font he or she had, but said font was not considered to be web-safe, he or she would have to find a way to work around the problem. Most often, the designer would have to make an image of the text in the typeface he or she wanted to use, but that is still nowhere near as effective as being able to use the font to display the text in its purest form on the website. This is changing, though, as advancements are being made to bring more fonts to the web so that designers will have a wider variety to choose from.

This study asks: What are some of the current trends in web typography that will allow designers to incorporate a font of their choosing on web pages? Font hosting services offered by various

companies seem to be the most popular choice in this situation. Work is being done by these companies to provide designers with more fonts to work with, such as Cufón, @font-face, Google Fonts, and Typekit.

The purpose of this study is to prove that there is more than just web-safe fonts to work with. This study has researched the different methods available to use more than the basic web-safe fonts and compare between them to see which ones are more beneficial to the designing process. These new font options provide a greater capacity to customize the design of a page, which works as a benefit to everyone.

Literature Review

Fundamentals of Typography

Typography, at its most basic, is the design and arrangement of type. In greater detail, it includes the selection of typefaces, point size, line length, leading, and word spacing, according to the online guide for cascading style sheet, (CSS), which help to “control the style and layout of multiple web pages all at once” (w3schools.com). The right combination of these elements not only makes type look good, but also easy to read.

For many years, there have been few ways to control the typography of web pages. Hypertext markup language (HTML), the coding used to build websites, and CSS were very basic in their infancy. Over time, these codes were developed to modify most of the typographical settings, such as the ones mentioned above. Though, one major area was still lacking, the ability to choose a typeface. Font choices for web designers used to be limited to 16 web-safe fonts. To display a typeface accurately, the font must be installed on the viewing computer. The lowest number of common fonts available on all system platforms was 16. “If you need a font for a commercial project, it’s

Ariel
Georgia
Trebuchet
Verdana

Figure 1– Samples of Web-Safe Fonts

best to use fonts purchased from a commercial foundry because you can use them legally on any project,” says Jay Nelson of *MacWorld*. Unfortunately, if a designer wants to

use this on his or her website, anyone who views the web page must have also purchased and downloaded that font. If a designer wanted to work around this, he or she would have to “[resort] to bitmaps (using images of text to replace HTML text via CSS) or Flash [“a cross-platform browser-based application runtime that delivers uncompromised viewing of expressive applications, content, and videos across screens and browsers” (Adobe)],” according to Dan Rubin in the article “Dan Rubin on Web Typography.” (Whitaker)

Improvements made to CSS has brought greater control over the choice of typefaces, “There is excitement in the air for digital design. The ability to use an increasing array of fonts on websites is becoming reality. No more settling for samey system fonts, no more limitations of image type — the time has come for Web fonts, it seems,” said Anna Richardson, writer for *Design Week*. “A cross-platform standard is emerging, some foundries are already selling Web versions of their fonts that can be embedded in Web servers, and new font services, such as TypeKit, Cufon and Fontdeck, offer catalogues and technical services around fonts that are licensed for use online.” (Richardson)

According to Ivan Brezak Brkan in his article “TypeKit Launches, Hopes to Save Typography on the Web,” the TypeKit service “[uses] the web standards compliant @font-face CSS declaration and a bit of JavaScript” to allow designers to use their choice of the hundreds of fonts offered by the TypeKit library. TypeKit makes this possible by hosting these fonts on third-party servers, also known as “clouds.” TypeKit offers limited access to their services for free and charges varying prices



Amaranth
Corben
Meddon
Wire One

Figure 2– Examples of Google Fonts for the Web

depending on the number of views a webpage gets as well as the number of websites using TypeKit.

(Brkan)

Jeffrey Way writes in the article “The Easiest Way to Use Any Font You Wish”, “thanks to the latest browser updates, developers can begin working with time-saving new properties... Unfortunately, the availability of these features is limited to a tiny fraction of our overall userbase... Luckily, a new contender, Cufón, has made the process unbelievably simple... Rather than Flash, it uses a mixture of canvas and VML to render the fonts.” The Cufón website allows designers to download a program to convert a selected font to become usable in a website’s design. This program allows the designer to select which glyphs to convert for simplicity and to lower the size of the javascript. After that, the program creates and saves the javascript file. The converted font is now ready to use in the design of a website. To activate the font, only a few lines of code need to be inserted into the website’s HTML. One of the biggest issues with this particular method is the possibility of copyright infringement. Designers should check the usage permission of the selected font to be sure that it is legal to use it in his or her website’s design. (Way)

Stephen Beale says in his article “Technology Review: Fontdeck,” that “once you select a font and assign it to a project, the service generates a link code and CSS rules that you can paste into web pages.” Fontdeck does not offer their services for free, but they only charge per font instead of webpage traffic. (Beale)

Search Engine Optimization

As previously noted, there are ways to work around using a non-web-safe typeface with a website's design. Unfortunately, if not done properly, it can interfere with search engine optimization, or SEO. According to SEO.com, "Search engine optimization is a method of getting your website to rank higher in search engines.... SEO helps the search engines recognize your relevance to specific keywords that people search for online." (SEO.com)

To help improve SEO, Alex Cleanthous, the Head Online Strategist of Web Profits, there are a couple of ways that web designers can achieve this. For example, if the title of the webpage is included in the header, and the header is an image file, it would be beneficial to name the header image file something related to the title of the webpage. Another way to increase SEO is to include keywords in a headline format as well as having them in a <meta> tag, which allows designers to put in a description of the webpage, within the html code, that is hidden off the webpage but can still be read by search engines. (Cleanthous)

Although there are ways to work around alternative methods of using a non-web-safe typeface with a website's design, it is much easier overall to be able to put the font right into the website's design and be able to use it throughout the site to keep consistency. (Cleanthous)

CSS and WebFonts

According to the article “@font-face: The Potential of Web Typography” by Ian Lynam and Craig Mod, CSS can control many typographical aspects, such as font, text decorations, font size, font variations, letter spacing, and font weight. How a designer can specify which typeface to use is through CSS. This is achieved by using the following code (Lynam and Mod):

```
font-family: “font-x”, font-y,(sans-)serif;
```

To show a font not installed on the viewer’s, or even the designer’s, computer, there are a few services that allow the web page to link to a font stored on a server. One of these is @font-face. So far it is only supported by the Firefox, Safari, and Opera browsers. “Firefox 3.5 only downloads the fonts as needed, so a stylesheet can list a whole set of fonts of which only a select few will actually be used,” states John Dagget. To use the Graublau Sans Web font provided by @font-face, for example, the following code needs to be placed within the CSS (Dagget):

```
@font-face {  
    font-family: Graublau Sans Web;  
    src: url(GraublauWeb.otf) format(“opentype”);  
}  
  
body {  
    font-family: Graublau Sans Web, Lucida Grande, sans-serif;  
    font-size: medium;
```

```
font-weight: bolder;  
  
line-height: 100%;  
  
letter-spacing: normal;  
  
text-decoration: underline;  
  
}
```

With the CSS code in place, a designer can specify this font and use it wherever they want.

Research Methods

The purpose of this study is to prove that there is more than just 16 web-safe fonts to work with and that those options will continue to grow. This study has researched the different methods available to use more than the basic web-safe fonts and compare between them to see which ways are more beneficial to the designing process. These options provide a greater capacity to customize the design of a page.

My chosen method to research this question was Elite and Specialized interviewing. Harvey Levenson wrote in his book, *Some Ideas About Doing Research in Graphic Communication*, “Elite and Specialized Interviewing, [is] a process devised by the famous communication theorist, Lewis A. Dexter. The focus of Dexter’s premise is that people who perceive themselves to be important, such as professionals and executives.” This method “requires asking precise, open-ended questions, but questions that are open to refinement as the research and interview continues.” (Levenson) Using this method, I have interviewed Rob Patti, a Technology Manager at LEVEL Studios to observe the opinions of a professional dealing with this particular situation. The questions he answered are as follows:

Having considered multiple methods of implementing non web-safe typefaces into website designs, what are some of the pros and cons of each method you researched?

How has being able to use non web-safe fonts changed the way websites are designed?

What do you see for the future of alternative web fonts? What do you want to see further developed?

To analyze and bring together the content to present whether or not the current trends and advancements in web typography are just a phase or if they will continue to grow for years to come I have used content analysis. “It is a method for quantifying qualitative information gathered from Elite and Specialized interviewing” (Levenson)

To quantify what determines success in advancing web typography, I have assigned points to what has been noted in what Rob Patti had to say about the advancement of web typography. There is a +1 assigned to each statement that is positive towards the advancements in web typography, as well as a -1 assigned to each statement that is negative towards the advancements made in web typography. After I counted the total amount of points, I drew my conclusion based on whether the total is positive, negative, or neutral.

With these methods, I have created a system where the effectiveness of the progressions in web typography can be measured. Using this system, I have planned my method of researching and determining the positive or negative impacts these advancements have made on web page design and whether or not these trends will still be around in the future.

Results

When asked about the positive and negative elements of each of the methods of implementing non web-safe fonts within web pages' design, Rob Patti gave a thorough outline for each method that was considered for implementation at Level Studios. While images render the same in all browsers, they can cause web pages to load slower than if with a font. Cufón is SEO friendly, but can occasionally show the web-safe font while the intended font is loading. @font-face is fast-loading, but does not render consistently across all browsers. The Google Font Library is also SEO friendly, but since the fonts are hosted on Google's servers, Google could update a font without notice, which could lead to a change in web pages' design.

Due to the seemingly equal parts of positive and negative statements about each method, points have been assigned to each statement made to quantify the pros and cons of each method and the overall effect of alternative methods in general. The result can be seen in Table 1.

STATEMENT	POINTS
Images	
Renders exactly the same in all browsers since they are just images	+1
Time consuming to maintain and create localized sites	-1
More images means more http requests and slower page loads	-1
Not SEO friendly, but this can be addressed with CSS	0

Subtotal	-1
Cufón	
SEO friendly	+1
Renders consistently across most browsers	+1
Slow loading. You will sometime get the flicker affect – page loads shows the web-safe font for a split second before the stylized font renders	-1
Requires loading of an additional javascript file.	-1
Subtotal	0
@font-face	
Fast loading. Font files are loaded directly from the web server just like images.	+1
SEO friendly	+1
Possible font licensing restrictions. Font files are uploaded to the web server, which means anyone can potentially download them if they know how. This can be a violation of copyright or licensing terms for some fonts.	-1
Doesn't render consistently in all browsers. Different browsers support different font file formats, which means you will sometimes get rendering inconsistencies like font weight, and anti-aliasing quality.	-1
May require additional font files for localized sites	-1
Subtotal	-1
Google Font Library	
Fast loading. Loads from Google's servers. Google servers use a CDN for caching.	+1
Renders consistently across all browsers.	+1
SEO friendly	+1
Limited to only the library of fonts that Google supports. Can't just select any font you own.	-1
Loads from Google's servers. If Google's servers go down, you lose the font and the page will fall back to a standard web-safe font like Arial or Times	-1
Google could potentially update a font at any time without notice. This could affect the design on existing pages that use that font.	-1
Subtotal	0
Total	-2

Table 1: Quantified Interview Results

When asked about how the ability to use non web-safe fonts has changed the way websites are designed, Patti responded with saying that “it allows designers more creative freedom when designing sites that must be accessible and SEO-friendly.” This is a positive movement for the combination of aesthetics and accessibility for a website.

For the future of web typography, Patti believes “font designs and copyright holders need to break away from the rules of print they are used to and develop licensing terms that allow for more flexible usage in electronic forms of media.” More lenient copyright rules would allow for even greater creative freedom in the design of a website, which will support the changes designing websites has experienced due to the ability to incorporate non web-safe fonts.

Conclusions

A designer's ability to have the same control over the design of web pages as the control he or she has over a printed page has been desired in the graphic communication community ever since the beginning of web design. Having a wider variety of typefaces to choose from brings designers one step closer to that dream.

After analyzing the results of the interview with Level Studios' Technology Manager, Rob Patti, it is clear that there are many different ways to implement non web-safe fonts into the design of web pages. What isn't clear is if one method is better than another. Each approach has its own benefits, but also a near equal set of drawbacks. As interest and need for variety in web fonts grows, it seems that the quality of implementation methods will grow as well. Until then, each designer needs to decide upon which method is right for him or her based on his or her designing needs.

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