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[Barbara S. Chaparro](#), Editor

The Effect of Website Typeface Appropriateness on the Perception of a Company's Ethos

by [A. Dawn Shaikh](#)*

Summary. This study investigated the effect of website typeface appropriateness on the perception of the site's company. Results indicate that typefaces that are high in appropriateness should be used for websites. Neutral and low appropriate typefaces significantly decreased the perception of the company as judged by professionalism, believability, trust, and intent to act on the site.

INTRODUCTION

Type has many important functions in the decoding process. Type should set the mood of a document, reveal the document's structure, guide readers in navigation, hint at the document's genre, indicate information about the author's ethos, and reveal areas of importance (Mackiewicz, 2004; Mackiewicz & Moeller, 2004; Schriver, 1997). Taking into account the diverse roles of typography, Bartram (1982) and Zachrisson (1965) specify two roles for type: a functional role (relating to legibility) and an aesthetic/semantic role, which impacts the "apparent 'fitness' or 'suitability' for different functions, and which imbue it with the power to evoke in the perceiver certain emotional and cognitive response" (p. 38).

Documents inherently contain both visual and verbal rhetoric. The verbal rhetoric of the document refers to the actual textual information; verbal rhetoric affects the ability of the reader to understand the content of the document. On the other hand, the visual rhetoric pertains to the visual elements of the document and affects the reader's initial impression of the document (Brumberger, 2001; Kostelnick & Hassett, 2003; Mackiewicz, 2004). Visual elements can "activate their own semantic representations" (Childers & Jass, 2002, p. 94) meaning they can take on their own linguistic meaning separate from that of the content. According to the renowned typographer, Matthew Carter, letters on a page should "provide a seamless passage of the author's thoughts into the reader's mind with as much sympathy, style, and congeniality as possible" (as cited by Boser, 2003, p. 44). The visual rhetoric can also affect the tone and ethos of a document (Kostelnick and Roberts, 1998). Ethos refers to a document's or author's voice and credibility and is used to establish trust in the relationship with the reader. Designers are encouraged to match the typeface to the content to improve ethos (Kostelnick & Roberts, 1998).

Brumberger (2001) found that typeface had no effect on the perception of the document in terms of ethos. Shaikh, Fox, & Chaparro (2007) found varying results regarding the ethos of a variety of onscreen documents. In spite of limited empirical evidence to support the idea that typeface appropriateness could affect the perception of the author's ethos, many typographers and designers posit this idea. With this in mind, this study attempted to provide empirical support of the notion that appropriate typeface selections lead to a better impression of onscreen documents and the author's ethos.

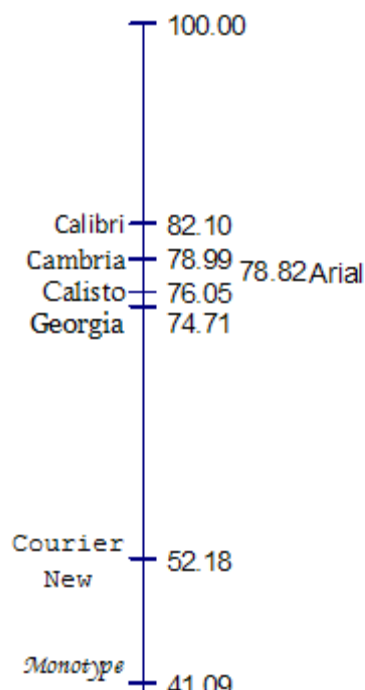
Typeface Appropriateness Overview

Typeface appropriateness was determined in a research study by the author using a paired comparison method as described by Thurstone's Law of Comparative Judgment (Thurstone, 1927a; Thurstone, 1927b). Based on the law, each typeface evaluated possesses a level of appropriateness for the document being evaluated. Participants were randomly presented two samples of an e-commerce website. The sample website was modeled after an online bookstore, but used nonsense text based on a third order approximation to English (as shown in Figure 1) to remove any effect of context. A small portion of an entire web page was presented but participants were asked to focus on the zoomed portion of the text. The text in the zoomed portion had an x-height of 10 to 11 pixels. Instructions asked the participants to click on the website sample with the typeface they viewed as most appropriate. Eleven typefaces were evaluated resulting in a total of 55 comparisons. Based on the average proportion of times the typeface was chosen as most appropriate, the typefaces were ordered along a continuum to represent the degree of appropriateness each represents for an e-commerce website. Figure 2 shows the proportional results of the paired comparisons for perceived typeface appropriateness for websites.



Figure 1. Sample of the web page used when determining typeface appropriateness. The same image was presented in two typefaces at a time and participants were asked to click on the one with the most appropriate typeface.

Website Text Proportions



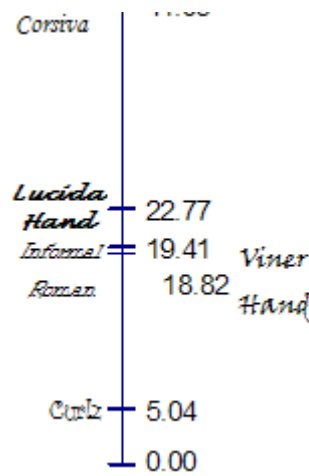


Figure 2. The average proportion of times a typeface was chosen as the most appropriate typeface when being compared to one other typeface. Calibri was perceived as the most appropriate with Cambria, Arial, Calisto, and Georgia scoring high as well. Curlz was perceived as the least appropriate.

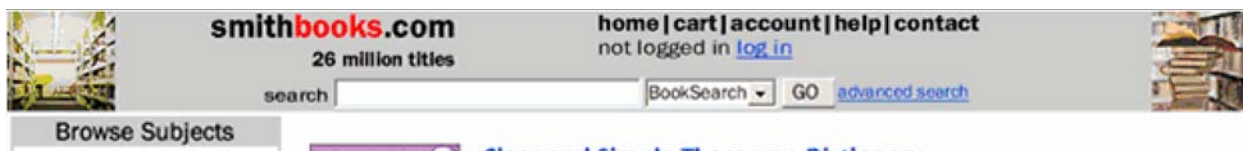
Effect of Typeface Appropriateness on Ethos

After determining the perceived appropriateness of various typefaces for websites, an additional study was conducted to determine the effect of appropriateness on the perception of the company's ethos. Ethos is defined by <http://www.dictionary.com/> as "the disposition, character, or fundamental values peculiar to a specific person, people, culture, or movement." The term is commonly used in communications to describe the believability or credibility of the creator of a message.

METHOD

Materials

After determining the relative appropriateness of the 11 typefaces, three were chosen to represent a high, neutral, and low level of appropriateness. Calibri (high), Courier New (neutral), and Curlz (low) were used to construct actual web pages based on the sample used in determining the typeface appropriateness. A book entitled *Clear and Simple Thesaurus Dictionary* was featured on the website page. The image and the description were taken from <http://www.barnesandnoble.com/>; the reviews were taken from <http://www.amazon.com/> for this book. Menu categories were chosen from various categories on common bookstore websites including those already mentioned and <http://www.borders.com/>. The images were created in Macromedia/Adobe Fireworks and Microsoft Word XP. The sample website page, which was modeled after <http://www.strandbooks.com/> utilized subtle colors and standard clip art available in Microsoft Word XP. For the non-essential text (i.e., header information), the typeface Franklin Gothic Demi was used. The final size of the website page image as viewed by participants was approximately 580 x 300 pixels. An online program was constructed using PHP and MySQL to run the study. Figure 3 provides examples of the final web pages used for this portion of the study.



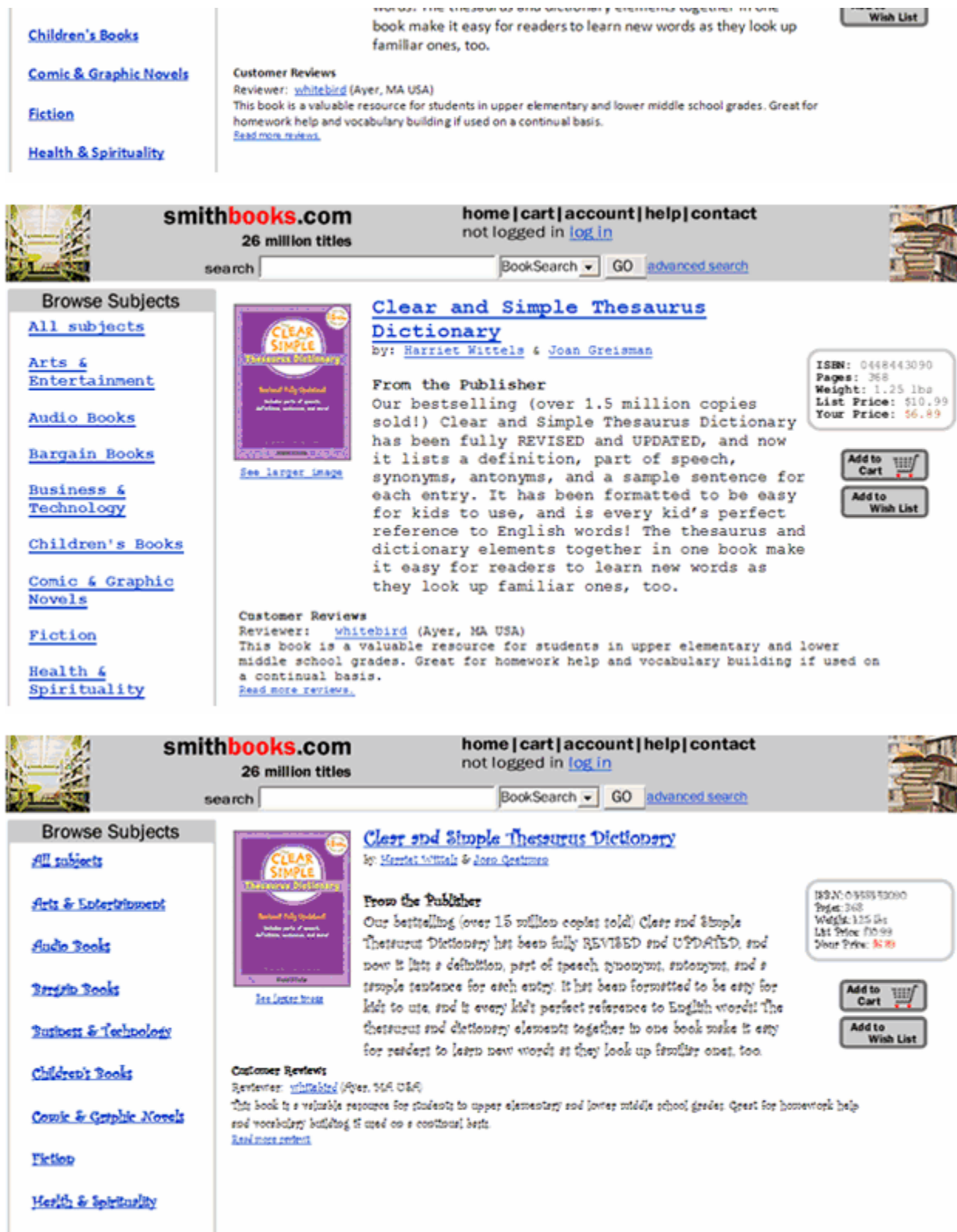


Figure 3. Samples of the e-commerce websites used to determine the perception of company ethos. Typefaces used include Calibri (top; high in appropriateness), Courier New (middle; neutral in appropriateness), and Curlz (bottom; low in appropriateness).

Procedure

One hundred fifteen participants completed a demographics questionnaire which included a series of questions designed to assess their familiarity and experience with six documents being tested (only

website text is discussed in this article). Based on the answers to these questions, participants only saw documents with which they were familiar. Participants viewed the web pages and answered a series of questions assessing their perceived ethos of the company being represented in the web pages. This included questions about the company's professionalism, believability, and trustworthiness. The questions were measured on a 7-point scale (-3 to +3). In addition to assessing the ethos of the authors, an "intent to act" question was assessed for the website text ("If you were shopping for a new book, how likely would you be to use this website?"). Participants were also asked to indicate the gender of the document's author or the gender of the intended audience.

RESULTS

The ethos/intent to act questions based on the 7-point scale were investigated using a series of one-way between-subjects ANOVAs. The independent variable being investigated was typeface appropriateness as represented by three typefaces with three levels (high, neutral, and low appropriateness). The dependent variable for the ethos portion was the score on each question on a scale of -3 to +3. In order to control for familywise error, an alpha level was set at $\alpha = .021$ based on recommendations from Tabachnick and Fidell (2001). Post hoc tests for all ANOVAs were carried out using Tukey HSD pairwise comparisons. Chi-square (χ^2) analyses were run to determine the relationship between the typefaces and perceived gender of the author/intended audience and one additional question for the assignment.

Evaluations of typeface appropriateness resulted in a significant difference in the perception of the sponsoring company's professionalism ($F(2, 113) = 57.75, p < .001, \text{partial } \eta^2 = .50$). Post hoc analyses (using Tukey HSD) revealed that the company utilizing the appropriate typeface was perceived as significantly more professional than the companies who used the neutral and inappropriate typefaces. The company using the inappropriate typeface was viewed as significantly less professional than the company represented in both of the other sites (Figure 4).

The believability of the information was also significantly affected by the typeface appropriateness ($F(2, 113) = 34.87, p < .001, \text{partial } \eta^2 = .38$). Again, the site using the appropriate typeface (Calibri) was judged to be significantly more believable than the other two sites as shown in Figure 5. Additionally, the site using the inappropriate typeface was viewed as significantly less believable than the other sites.

Similarly, the perception of trustworthiness of the company was also significantly affected by typeface appropriateness ($F(2, 112) = 30.26, p < .001, \text{partial } \eta^2 = .35$). The site in the appropriate typeface, as shown in Figure 6, was rated as significantly more trustworthy while the site in the inappropriate typeface was seen as significantly less trustworthy.

As shown in Figure 7, the intent of the participant ("If you were shopping for a new book, how likely would you be to use this website?") was significantly affected by typeface appropriateness ($F(2, 112) = 47.51, p < .001, \text{partial } \eta^2 = .46$). Post hoc analyses revealed that participants were significantly more likely to use the site when it was presented in the appropriate typeface. Participants were also significantly less likely to use the site offered in the inappropriate typeface.

The final question of the ethos section asked participants to indicate the gender of the intended audience of the ad. The data for this question failed to meet the assumptions of the k-related samples χ^2 test ($> 20\%$ of the cells had expected frequencies of less than 5 and one cell had a value of 0). Overall, participants could not tell what gender the intended audience was for the sites offered in Calibri and Courier New; however, on the site created with Curlz, participants (73%) tended to think it was for females.

Website Text
Professionalism of the Company



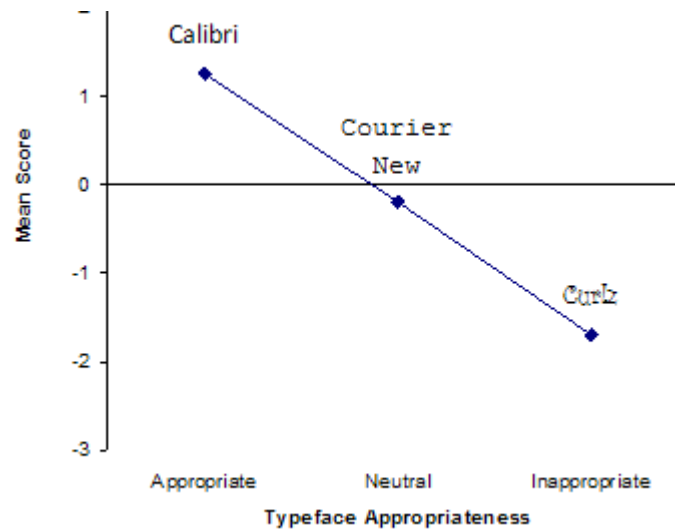


Figure 4. Perception of the professionalism of the company represented on the website based on typeface appropriateness. The company using the appropriate typeface was perceived as significantly more professional than the companies using the neutral or inappropriate typefaces. The company using the inappropriate typeface was seen as significantly less professional the other two companies.

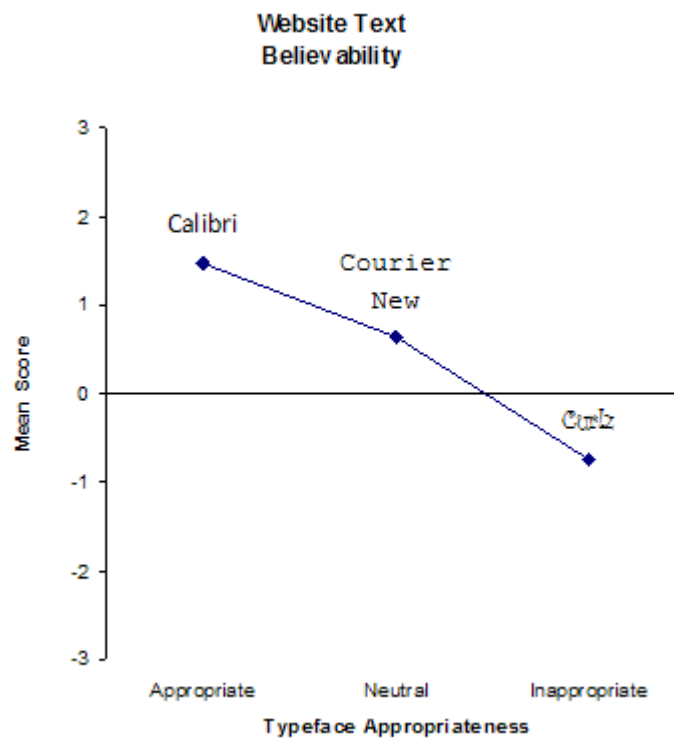


Figure 5. Perception of the believability of the company represented on the website based on typeface appropriateness. The site with the appropriate typeface was more believable than the other two sites. The site using the inappropriate typeface was scored as significantly less believable than the other two sites.

Website Text
Trustworthiness of the Company?

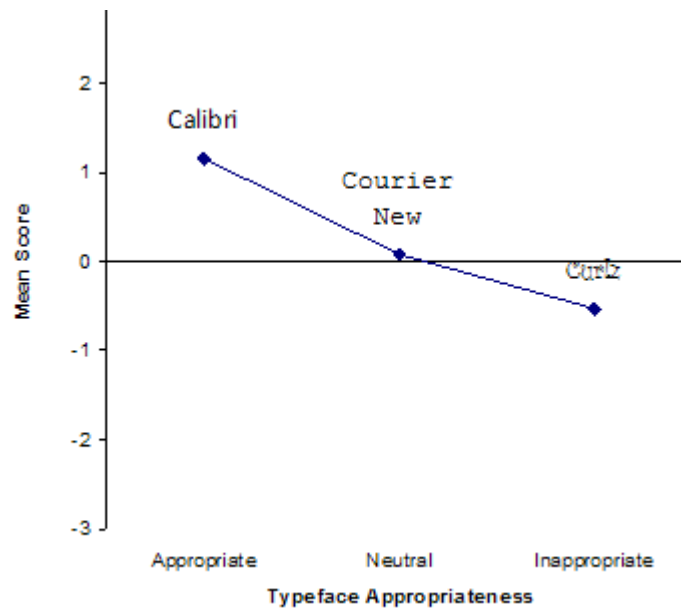


Figure 6. Perception of the trustworthiness of the company represented on the website based on typeface appropriateness. The company using the appropriate typeface was rated as significantly more trustworthy, and the company using the inappropriate typeface was significantly less trustworthy than the other two sites.

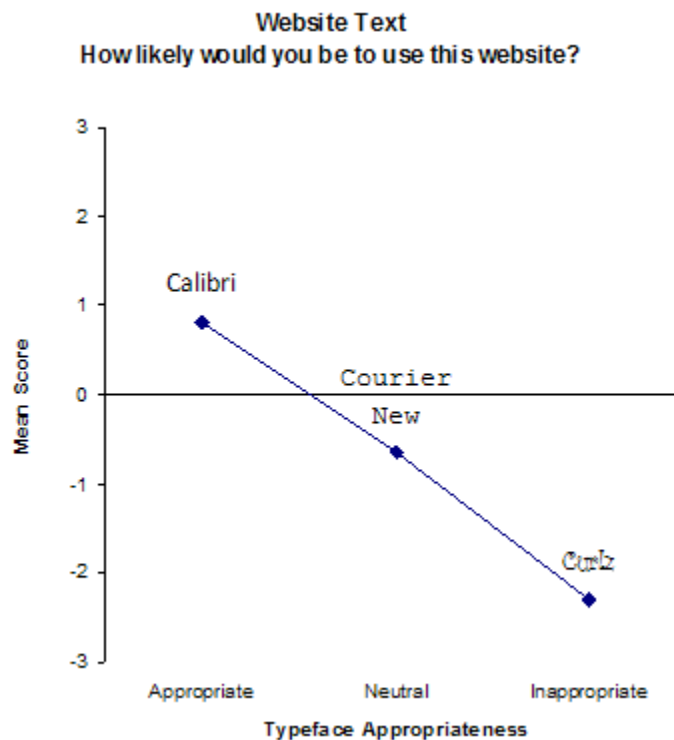


Figure 7. Likelihood of participants to use the website based on typeface appropriateness. The participants were significantly more likely to use the site with the appropriate typeface than the other two sites. They were significantly less likely to use the site with the inappropriate typeface.

DISCUSSION

The web page presented in either a neutral or inappropriate typeface resulted in a decreased perception

of the company being represented. Courier New, the neutral typeface, was perceived as comparable to the inappropriate typeface (Curlz) in terms of perception of the company represented in the website. Additionally, participants were more likely to act on the document when the typeface was appropriate. This finding indicates that in addition to creating a more positive ethos, the appropriate typeface might translate to higher returns for companies (more hits on the website). The results of this study indicate that there is a small selection of typefaces that are seen as appropriate. Even a typeface that is perceived as neutral in appropriateness results in decreased trust, professionalism, and believability. Companies should carefully choose typefaces that are judged as highly appropriate for their online presence.

*Note: This article presents only a small portion of findings from a comprehensive study investigating the perceptions of typeface personality by Dawn Shaikh. Please contact [Dr. Shaikh](#) for more information.

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