TYPOGRAPHY

GETTING THE HANG OF **WEB TYPOGRAPHY**

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Founded in September 2006, Smashing Magazine delivers useful and innovative information to Web designers and developers. Smashing Magazine is a well-respected international online publication for professional Web designers and developers. Our main goal is to support the Web design community with useful and valuable articles and resources, written and created by experienced designers and developers.

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Table of Content

Preface

Script is one of the oldest cultural assets. The first attempts at written expressions date back more than 5,000 years ago. From the Sumerians cuneiform writing to the invention of the Gutenberg printing press in Medieval Germany up to today's modern desktop publishing it's been a long way that has left its impact on the current use and practice of typography.

Even though we neither cut nor set metal types any longer we still use terms like uppercase and lowercase letters referring to drawers in which types were kept or – in German – use expressions like Schriftschnitt (English = typeface) which refers to the cutting of individual types. On the other hand, most of the people who deal with typography in their daily lives, whether they are graphic or web designers have no special training for this independent craft.

The implications of desktop publishing have led to a flood of poorly designed brochures, flyers and web pages. In web design especially illegible text, incorrect use of punctuation marks and inappropriate font combinations or use of line widths are frequent. The new techniques that web fonts offer – much hailed by some and dreaded by others – might bring about even worse examples of ugly and illegible web typography.

In order to avoid this, we have put together Smashing Magazine's best articles on web typography with one additional article series and glossary in e-book form for you as reference work and inspiration. Have fun creating even better Web sites with beautiful and readable rich web typography!

— Manuela Müller, Smashing eBook Editor

The Ails Of Typographic Anti-Aliasing

Tom Giannattasio

As printed typography enjoys the fruits of high-DPI glory, proudly displaying its beautiful curves and subtleties, its on-screen counterpart remains stifled by bulky pixels, living in a world of jagged edges, distorted letterforms and trimmed serifs. Until display manufacturers produce affordable 200 or 300 PPI monitors, we'll have to rely on software advances to fix these problems.

Enter **anti-aliasing**: the next best thing to a world of higher-resolution monitors. The concept of anti-aliasing is fairly simple: add semi-transparent pixels along the edges of letterforms to smooth the appearance of the "stair-step" effect.

However, many factors and technologies determine the actual effectiveness of the process: hinting, subpixel rendering, software capabilities and operating system specifications, to name a few.

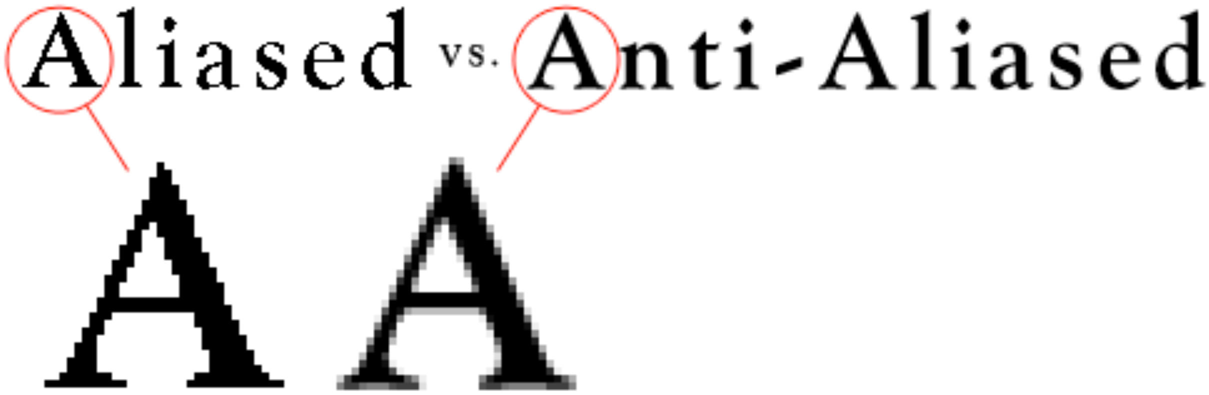
Here, we’ll look at what you as a designer can do to improve the results of anti-aliasing with Photoshop, Flash and CSS. Plus, we’ll explain the constraints of hardware, browsers and operating systems.

Technologies

Aliased vs. Anti-Aliased

It takes only a quick glance to realize that anti-aliasing is extremely important to making text legible. With few exceptions, anti-aliased text can dramatically reduce eye strain, not to mention that it renders glyphs much closer to their intended design.

Because of this, **designers must decide how, not if, anti-aliasing should be used**. This decision is based on a number of factors that one has to consider in the process from design to delivery.

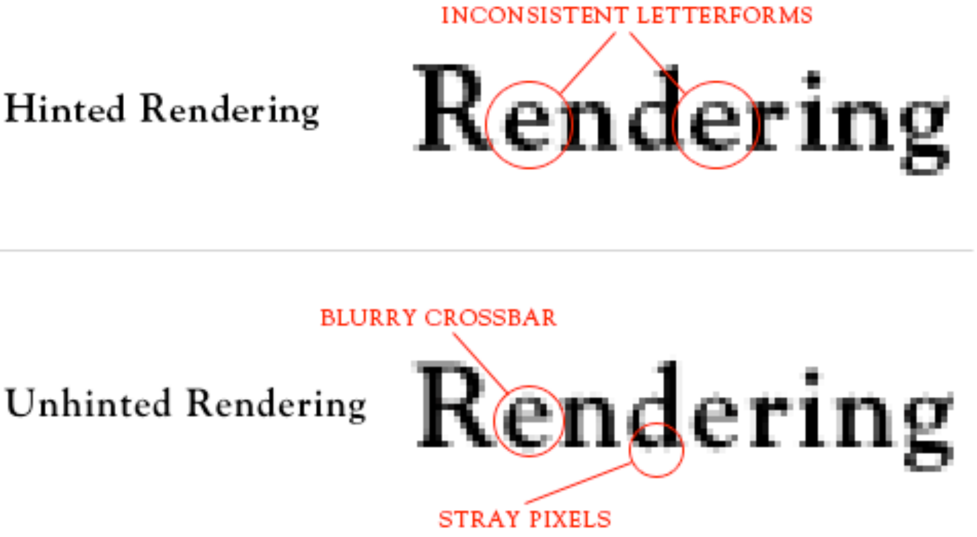


42pt “Goudy Oldstyle Bold”: aliased and anti-aliased versions

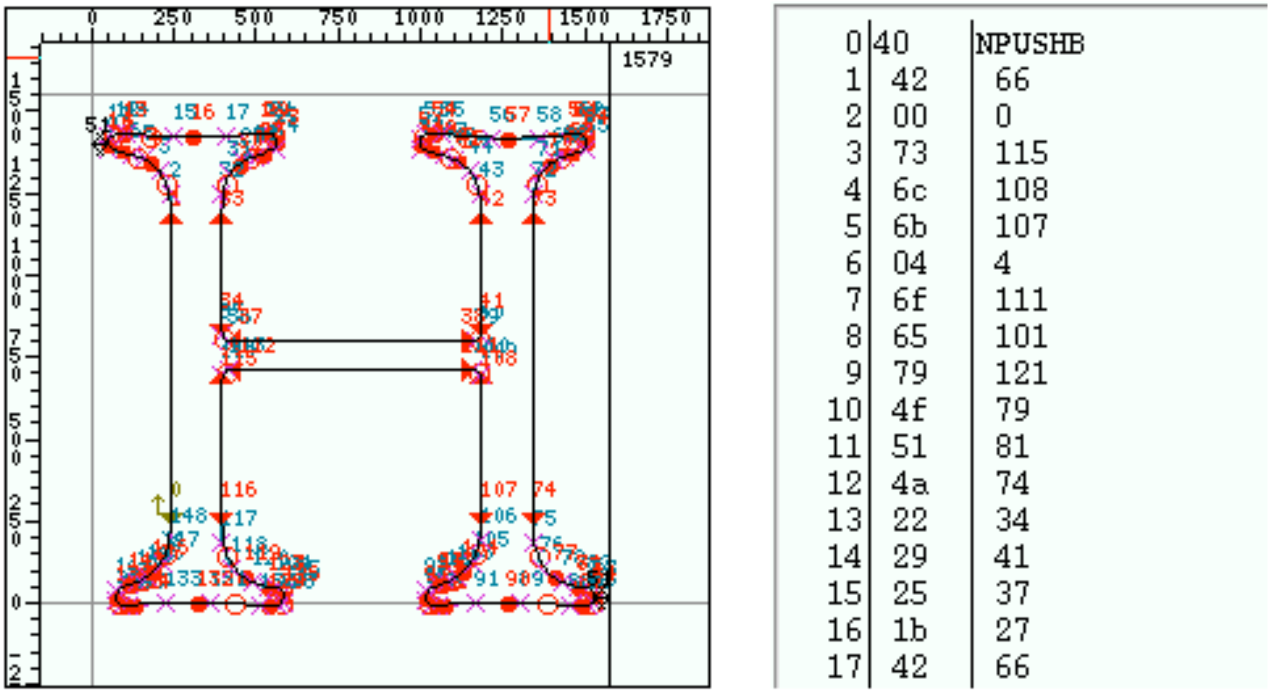
Font Hinting

Most text rendering engines rely heavily on hinting to determine exactly which areas of a glyph should be smoothed. Font hinting, or instructing, uses tables of mathematical instructions to **align letterforms to the pixel grid** and to determine which pixels should be gray scaled. Though most software provides auto-hinting using standardized algorithms, ideally the process would be done manually by the type designer and embedded in the file.

Put simply, these instructions work by modifying the position of structurally important points, such as those found along splines or at the base of stems, and aligning them at pixel boundaries. Intermediate points are then repositioned based on their relationship to the primary points. Using an open-source font editor, such as FontForge, allows you to view and edit a font's hinting information. See how much work goes into producing a clear glyph; your appreciation of type designers and font engineers will certainly increase.



Hinted and unhinted type both have their pros and cons, leaving the designer to choose between legibility and typeface integrity.



```
 0 40    NPUSHB
 1  42     66
 2  00     0
 3  73     115
 4  6c     108
 5  6b     107
 6  04     4
 7  6f     111
 8  65     101
 9  79     121
10  4f     79
11  51     81
12  4a     74
13  22     34
14  29     41
15  25     37
16  1b     27
17  42     66
```

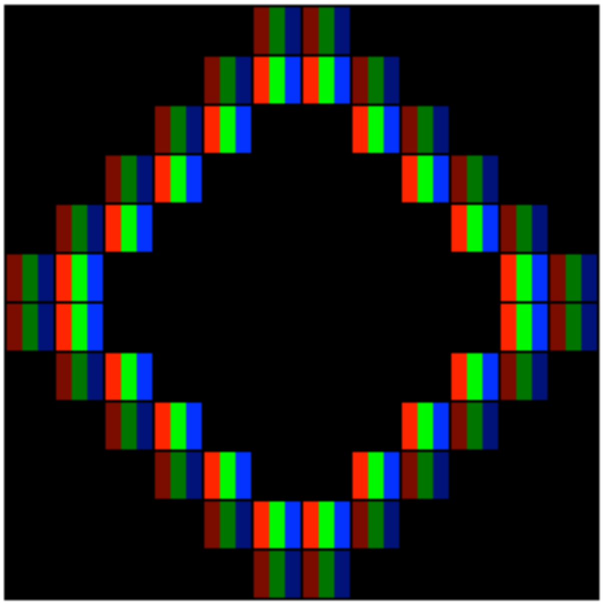
Viewing the hints for Goudy Oldstyle's "H" using FontForge.

Subpixel Rendering

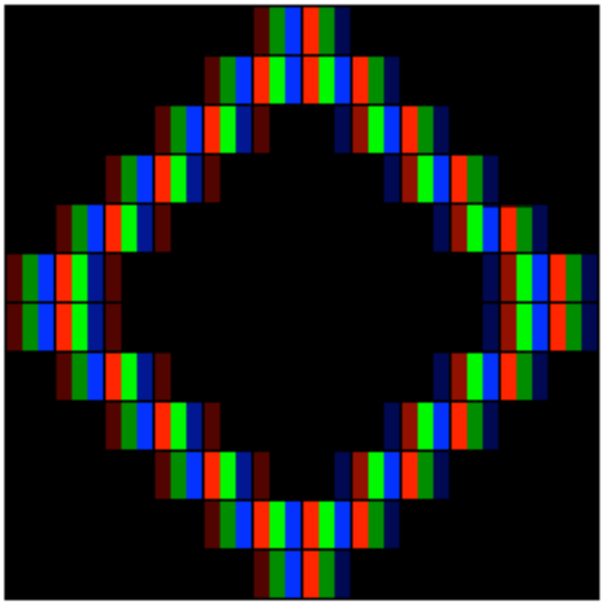
Every pixel on a standard monitor consists of three components: a red, a green and a blue. The brightness of each of these sub-pixels is controlled independently, and because of their small size, our eyes blend the three into one solid-colored pixel.

Typical anti-aliasing sets even values for each of these subpixels, resulting in full grayscale pixels. Subpixel rendering exploits the individuality of each single-colored component and uses it to increase the perceived resolution of the monitor.

This allows a pixel to take on **visual weight from neighboring pixels**, thereby allowing type to be smoothed in smaller increments. Rendering the type in this manner can produce subtle color shifts visible along the edges of glyphs.



FULL-PIXEL RENDERING

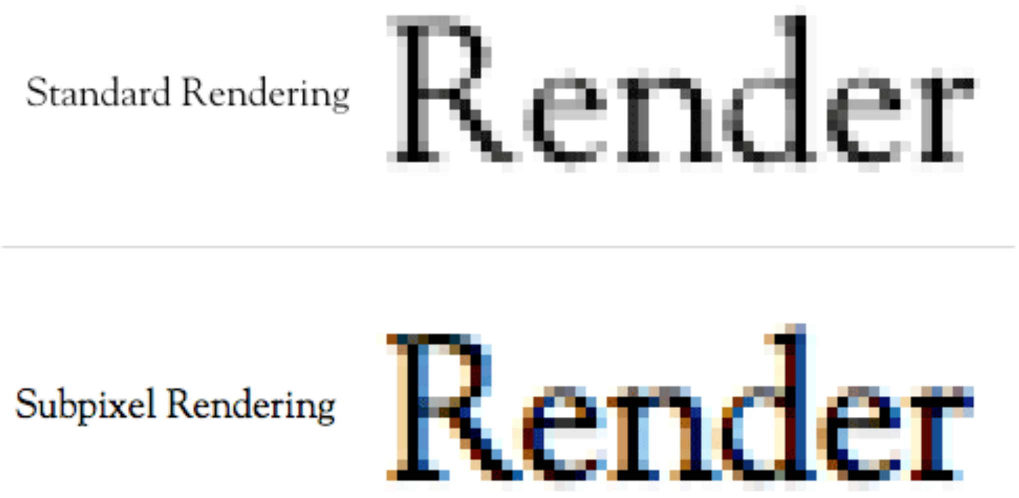


SUB-PIXEL RENDERING

Subpixel rendering relies on a perfectly aligned grid of pixels, which makes LCD flat panels the only type of monitor on which this technique works consistently. CRT monitors suffer from inaccuracies and oddly distributed pixels, making subpixel rendering extremely difficult to pull off.

Even LCD monitors have variations in their subpixel arrangement that must be accounted for; some monitors are arranged in the order of RGB, while others are ordered BGR.

Subpixel rendering triples the perceived resolution by setting each color component separately.



Subpixel rendering produces more desirable results than standard rendering, but adopts color fringes.

Input

As designers and developers, we have limited control over how type is ultimately seen by the end user, but by using the proper delivery method, we can ensure an optimized presentation. That said, we'll look here at the three most common ways in which text is sent to the user: HTML, images and sIFR. Each of these methods has an ideal use that, when properly implemented, can dramatically increase legibility and thus the overall user experience.

HTML Text

HTML text undoubtedly accounts for the majority of text found on the web. Until recently, designers had absolutely no control over anti-aliasing with client-side technologies. CSS 3 introduces two new ways to control how HTML text is delivered: font-smooth and @font-face.

font-smooth

Font-smooth allows you to control when smoothing is used but not how it's used; the anti-aliasing method is still controlled by the user's environment. This setting is not widely supported yet but may prove useful by allowing us to turn anti-aliasing off at small point sizes — where type often becomes blurry. It may become doubly useful when more complex and non-browser-safe fonts are embedded with the new @font-face rule.

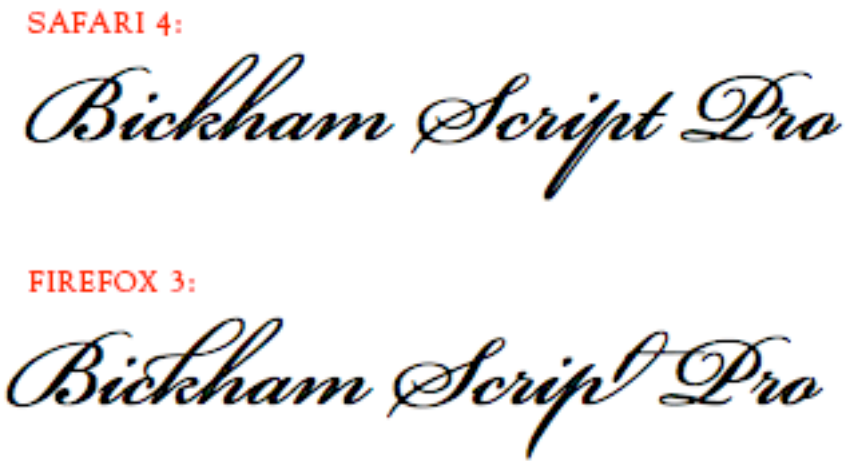
@font-face

The @font-face rule is an exciting new feature of CSS 3 that designers have been waiting years for. Although we've been able to add obscure typefaces to font stacks for quite some time, a large majority of users don't have high-end fonts on their local machines and end up with a typical Web-safe font (e.g. Times New Roman substituted for Adobe Garamond Pro).

By allowing the browser to import a font file from a URL, we can now serve the user any font we'd like without relying on their font library. This means that we can serve not only more unique fonts but also those that are better hinted and more legible.

Despite the promise this feature holds to create a more beautiful world of online typography, we may still see designers opt for fonts like Verdana, which have been designed and hinted specifically for on-screen viewing. Some of our favorite fonts from the print world **just look bad** when rendered on the screen, especially at smaller text sizes.

Surely we'll see new industry segments arise as a result of the support of @font-face, including an influx of browser-hinted typefaces made available through services such as typekit.

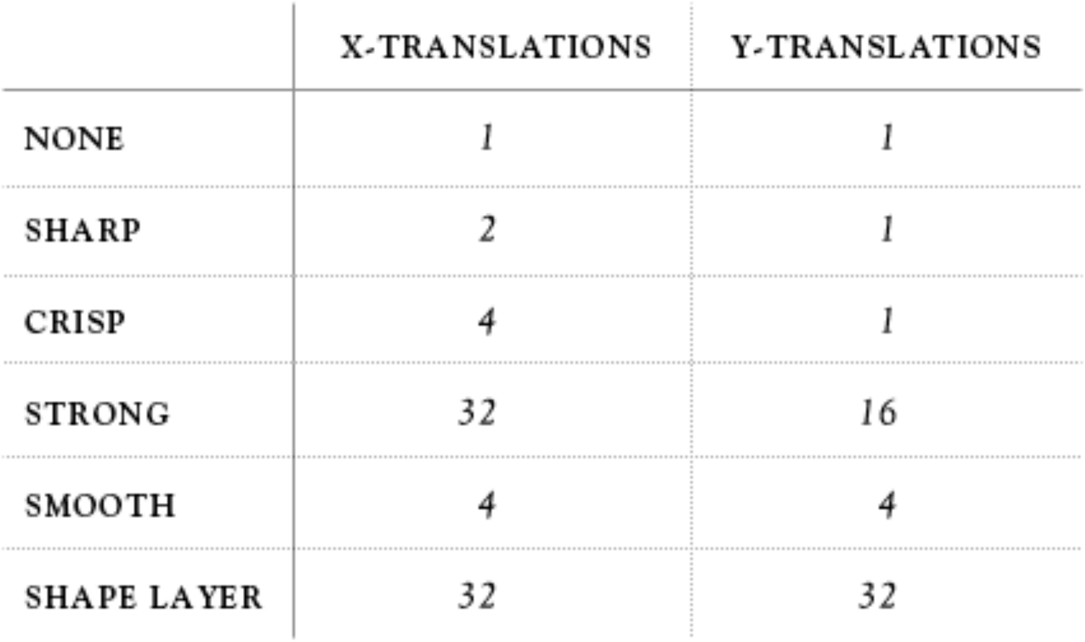


Bickham Script Pro embedded using @font-face and rendered in Safari 4 and Firefox 3. Notice the OpenType swashes and ligatures supported in Firefox 3!

Text as Image

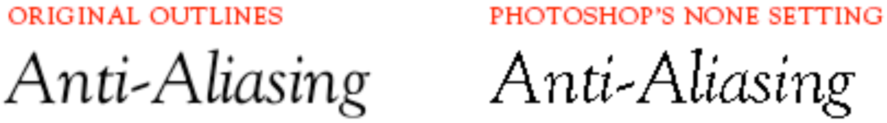
Serving text as an image may have limited uses, but it allows you to fine-tune every letter if necessary. Photoshop provides five pre-set anti-alias settings, which determine pixel values using different algorithms in conjunction with the document's pixel grid. Unfortunately, **none of these settings allow for subpixel rendering**, but by using the Free Transform option to nudge the layer's position, you can effectively force the algorithms into rendering cleaner.

Each setting allows a different amount of origins, and some only produce variations when translated along the x-axis. Below is a table of available transformations.



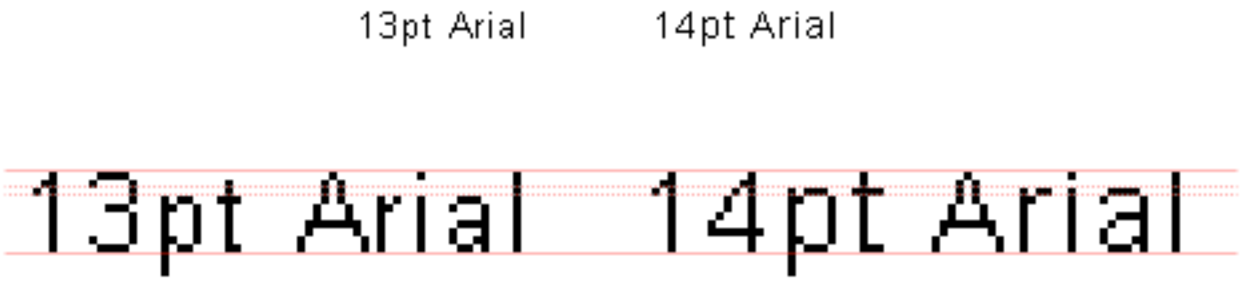
	X-TRANSLATIONS	Y-TRANSLATIONS
NONE	1	1
SHARP	2	1
CRISP	4	1
STRONG	32	16
SMOOTH	4	4
SHAPE LAYER	32	32

None



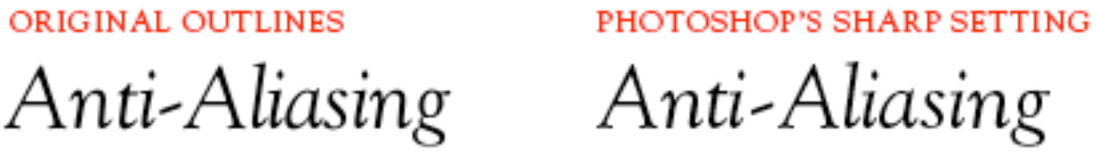
Aliased text, created using the None setting, has a very limited use and typically looks best between point sizes of 9 and 18. Sizes lower than this range will result in unidentifiable characters, and larger sizes will lead to increased character weight and overly jagged edges. Depending on the font, **sometimes two different point sizes will render at the same height, causing a shift in letter spacing, width and x-height**.

For example, 14pt Arial renders 10 pixels high with an x-height of 8 pixels. Arial at 13pts also sits 10 pixels high but has an x-height of only 7 pixels – a slight but very perceivable difference. When tightly tracked, this setting may also require manual kerning, because some letters will sit pixel to pixel against each other.



13pt and 14pt Arial render with the same cap height but different x-heights.

Sharp

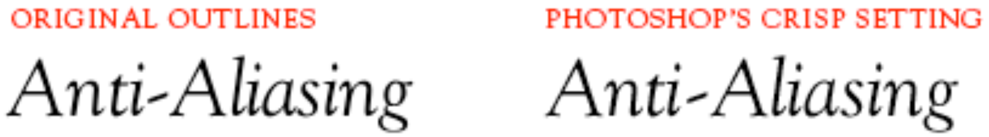


The Sharp setting uses very tight grid-fitting and produces sharp, if not too sharp, type. The plotting of pixels with this setting is very similar to how the None setting plots them but allows for a certain degree of smoothing. In fact, if pixels are set atop one another, you can actually see that a majority of solid pixels carry over from None to Sharp.

While the cap height and x-height typically remain the same, you might see an increase in character weight and width.

Note that Sharp has a tendency to completely cut subtle shape variations from rendering and sometimes causes inconsistent letterforms, so if typeface integrity is important to you, you may want to try a different setting.

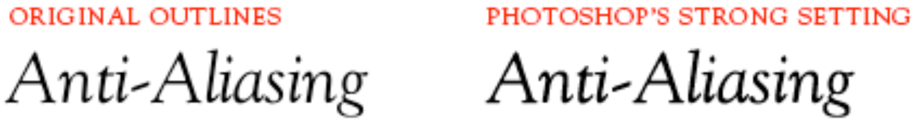
Crisp



The Crisp setting maintains much of the font's original weight and curvature but cleans up some of the awkward pixels created by light serifs and thin strokes — which is especially useful for larger point sizes.

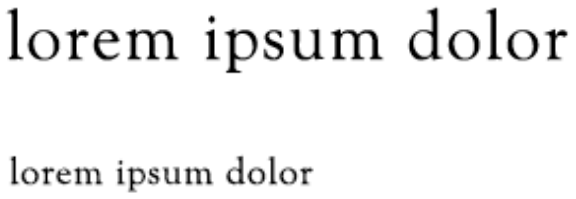
With the Crisp setting, however, you sacrifice the ability to nudge the layer on the y-axis.

Strong



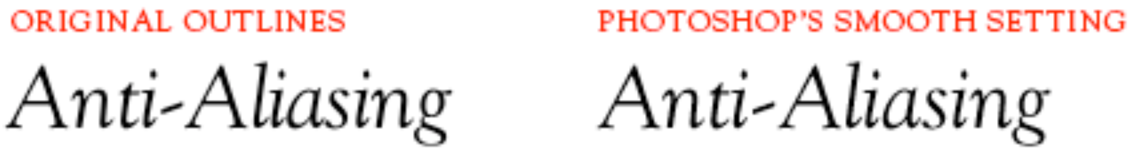
The *Strong* setting is notorious for adding unnecessary weight to a typeface, but it provides the most freedom with translating the origin, with 32 x-axis variations and 16 on the y-axis.

The variety of origins with this setting can come in very handy when working with complex letterforms. *Strong* may also be useful when working with a typeface that has very thin strokes.



Subtle animation showing the 32 anti-aliasing origins at 36pt, 18pt and 12pt.

Smooth



The Smooth setting is the closest to unhinted anti-aliasing and therefore **remains truest to the original glyph shape**. This algorithm is best used on medium-sized to large type, because it tends to render very light and often blurry at smaller point sizes. If used with an appropriate typeface at a proper size and if the origin is properly adjusted, this setting can produce a beautiful balance between crispness and letterform fidelity.

Shape Layer

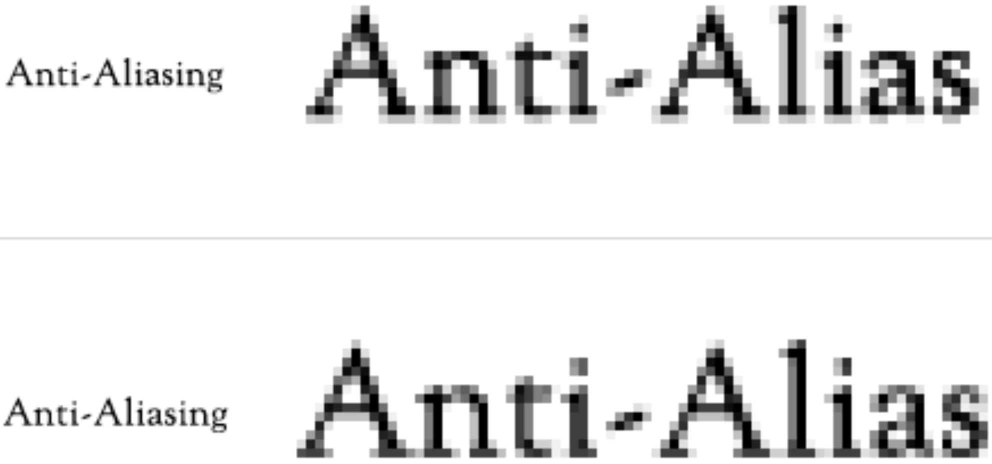
If Photoshop's hinted algorithms all produce undesirable results, you may want to attempt using unhinted anti-aliasing by way of converting the type to a shape layer. This allows you access to the original outlines of the font, which draw values based on the percentage of the pixel enclosed in the shape. What you sacrifice in editable type, you make up for in origin transformations: 32 on both the x- and y-axes. Though usually a last resort, don’t rule out the possibility of using a Shape Layer; it can often produce much better results than Photoshop’s algorithms.

Fractional Widths

Another, more veiled, setting that sometimes helps with anti-aliasing type at small point sizes is the Fractional Widths option located in the Character palette’s fly-out menu. With this setting turned on, the character spacing is set to varying fractions of pixels. This is ideal for auto-kerned type at large sizes but tends to bump the type either too close together or too far apart at smaller sizes. Turning this option off will round all character spacing to whole pixel values, which may help better space the problematic type. This is a hit-or-miss option, so use it wisely.

Decimal Point Sizes

Typophiles might cringe at the idea of using a decimal point size, but when designing for digital media, standard point sizes don’t always conform to the pixel grid. By using decimal point sizes and either the Smooth or Strong anti-alias setting, you can usually bring a blurry typeface back into focus. Please note that I am not condoning the use of vertical or horizontal scale!



Using decimal values can dramatically improve anti-aliasing results, as seen above. Top: 16pt Goudy Oldstyle with Strong Anti-Aliasing. Bottom: 16.5pt Goudy Oldstyle with Strong Anti-Aliasing.

sIFR Text

Using sIFR to replace headers with a block of Flash brings benefits beyond the obvious. Yes, it solves the problem of having to use CSS image replacement techniques to provide a wider array of fonts, but it also allows incredible control over how the type is anti-aliased. Particularly useful are the sharpness and thickness settings, which control the edges of glyphs. (If only Photoshop had these settings!)

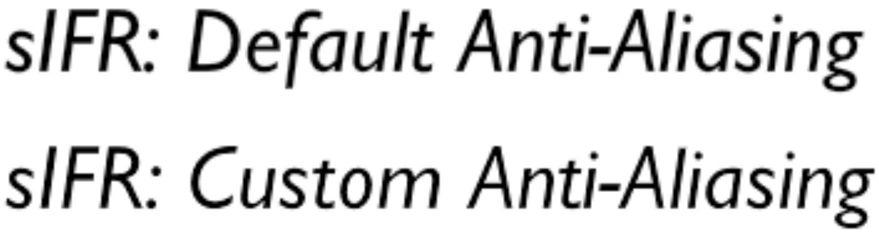
You can set and tweak a number of settings to fit your implementation; and they can be controlled by passing keyword arguments inside the **sifr-config.js** file. These settings include:

sharpness (number)
A value between -400 and 400, which determines how sharp (positive number) or soft (negative number) the edges of the glyphs will be.

thickness (number)
A value between -200 and 200, which sets the thickness of the glyph edges.

gridFitType (string)
Possible values are: “none,” “pixel” and “subpixel.” This specifies how prominently the horizontal and vertical lines are fit to the monitor’s pixel grid. “Pixel” and “subpixel” usually produce the best results.

antiAliasType (string)
This is set by default to “advanced,” which allows the anti-alias settings above to be applied. It can also be set to “normal,” but this option limits sIFR’s rendering capabilities to accommodate earlier versions of Flash Player and overrides any of the properties above.



sIFR: Default Anti-Aliasing

sIFR: Custom Anti-Aliasing

sIFR allows you to precisely customize your anti-alias settings. Notice that the custom setting is slightly thinner and crisper.

Output

Displays

Because very few people have monitors with resolutions higher than 100 pixels per inch (PPI), we have to rely on software to trick our eyes into thinking that the resolution is greater than it really is. Some advances are being made by display manufacturers, but they are still beyond the average Web surfer's budget.

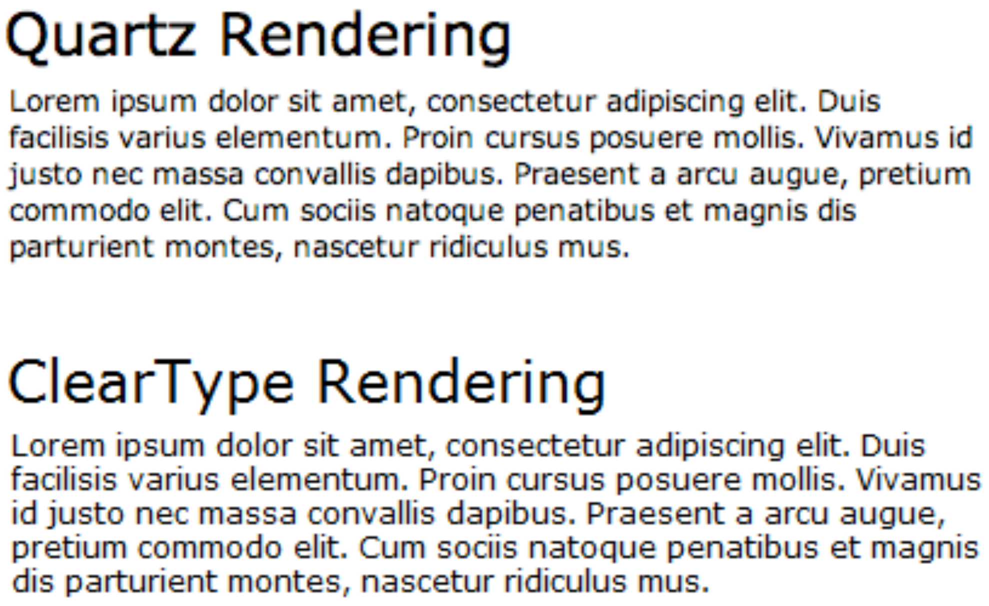
A typical LCD monitor (which you're probably reading this on) has a dot pitch of around .20 or .30 millimeters. New technologies, such as the Ferro Liquid Crystal display are touted to reduce that number to .012 millimeters. Bringing this technology to the mainstream would bring tremendous advantages to the world of design and on-screen reading. However, until they become affordable for the average consumer, we'll be relying on software advances.

Operating System

Microsoft and Apple have both delivered technological advances in the world of anti-aliasing, but they have somewhat different approaches. The current versions of both operating systems use anti-aliasing and subpixel rendering. Both vendors have dramatically increased legibility within their operating systems, but controversy has arisen over the aesthetics and legibilty of each.

Microsoft's entry in the competition — which is characterized by tight grid-fitting — is aptly named ClearType. By forcing characters tightly into the pixel grid, ClearType increases contrast along the edges of glyphs and renders more crisply.

Distinctly different is Apple’s Quartz 2D, which puts emphasis on maintaining the shape and integrity of the typeface. This certainly makes sense, given the high proportion of designers who work on Macs. But Quartz rendered type often appears blurry, which can cause eye strain with extended reading.



Quartz Rendering

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis facilisis varius elementum. Proin cursus posuere mollis. Vivamus id justo nec massa convallis dapibus. Praesent a arcu augue, pretium commodo elit. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

ClearType Rendering

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis facilisis varius elementum. Proin cursus posuere mollis. Vivamus id justo nec massa convallis dapibus. Praesent a arcu augue, pretium commodo elit. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.

Windows Vista and Window XP both use Microsoft’s ClearType rendered either by Windows Presentation Foundation or Graphics Device Interface; both handle text in a very similar fashion, though WPF doesn’t snap horizontally to the pixel grid. Windows XP actually comes defaulted to monochromatic anti-aliasing.

But ClearType can be turned on by going to **Control Panel → Appearance and Themes → Display**, clicking on the “Appearance” tab, selecting “Effects…” and changing the drop-down from “Standard” to “ClearType.” The operating system itself allows for very little customization of ClearType; you basically choose between on and off. Microsoft's ClearType Tuner PowerToy, though, allows some control over how it renders. Windows 7 brings a new rendering platform, named DirectWrite, that introduces subpixel positioning and y-direction anti-aliasing. As seen in this presentation, the advances made with DirectWrite are quite impressive and sure to be adopted by other vendors.

Apple's Quartz 2D now renders type using Core Text, which has recently replaced Apple Type Services. The Quartz 2D displays type much closer to the typeface's original design, which is similar to how you might expect to see it in print form.

While this seems like a good idea from a design perspective, it doesn't hold up with legibility, at least not on common LCD screens. Quartz text could conceivably appear much better if we were using higher-resolution monitors. Because Apple has complete control over both the operating system and the hardware that it runs on, perhaps a 200 PPI iMac is just around the corner. We can hope!

Browsers

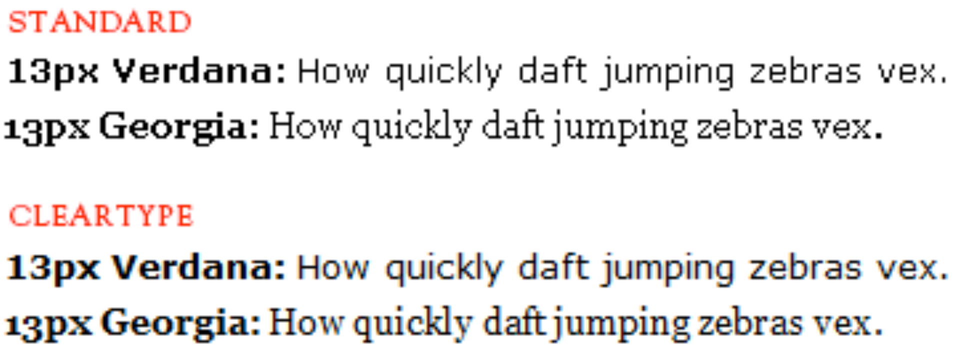
The most current browsers today all inherit the anti-alias settings of the operating system. But with one anomaly. Firefox 3 in Mac OS X seems to inherit the operating system's settings but also seems to apply more precise grid-fitting and kerning. Perhaps Mozilla is attempting to improve on Quartz's blurry rendering.

Unfortunately, we have no way to control or even tell how the user's browser will render text. What we can do is understand the nuances of each browser and make sure that we deliver a suitable presentation across all viewing platforms.

Below is a list of browser capabilities and type samples to help you gain some insight into how they handle anti-aliasing.

Windows XP and Vista

- **IE6, IE7 and IE8**



STANDARD

13px Verdana: How quickly daft jumping zebras vex.

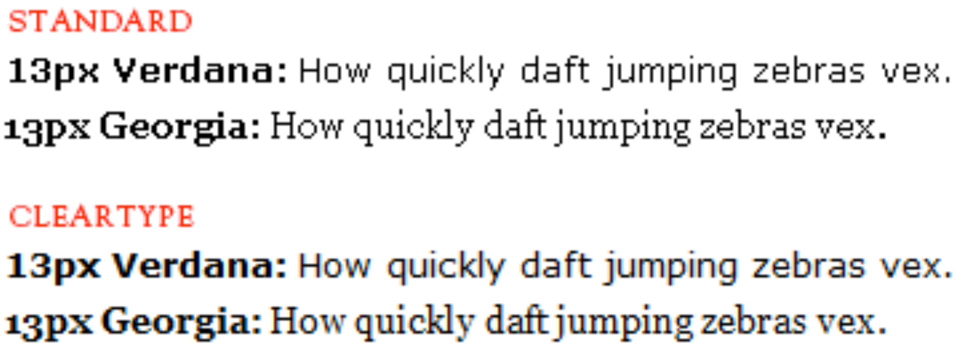
13px Georgia: How quickly daft jumping zebras vex.

CLEARTYPE

13px Verdana: How quickly daft jumping zebras vex.

13px Georgia: How quickly daft jumping zebras vex.

- **Firefox 2 and 3**:



STANDARD

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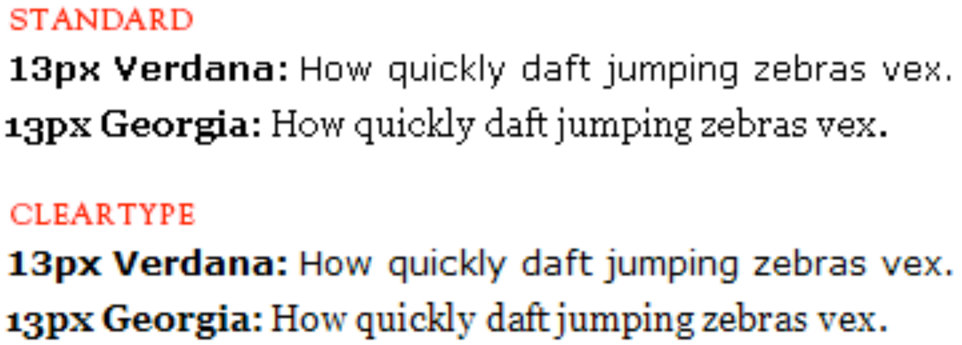
13px Georgia: How quickly daft jumping zebras vex.

CLEARTYPE

13px Verdana: How quickly daft jumping zebras vex.

13px Georgia: How quickly daft jumping zebras vex.

Safari 4:



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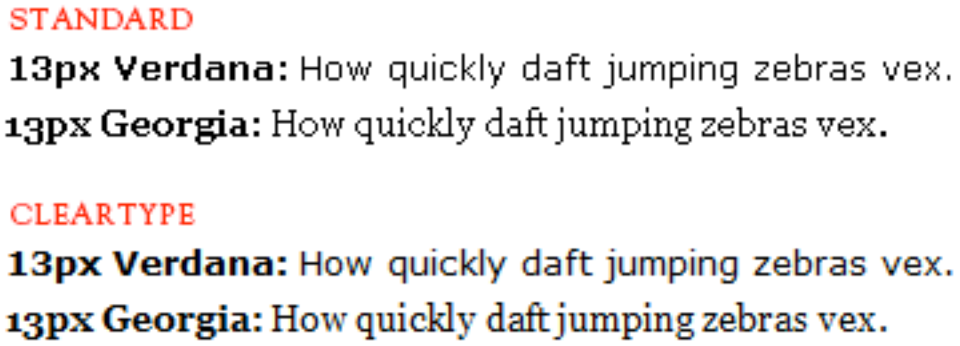
13px Georgia: How quickly daft jumping zebras vex.

CLEARTYPE

13px Verdana: How quickly daft jumping zebras vex.

13px Georgia: How quickly daft jumping zebras vex.

- **Chrome:**



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CLEARTYPE

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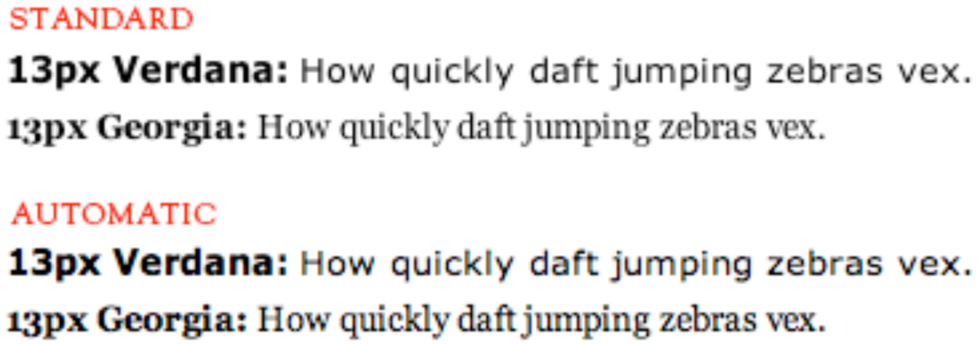
13px Georgia: How quickly daft jumping zebras vex.

Mac:

- **Firefox 2 in OS X:**



STANDARD

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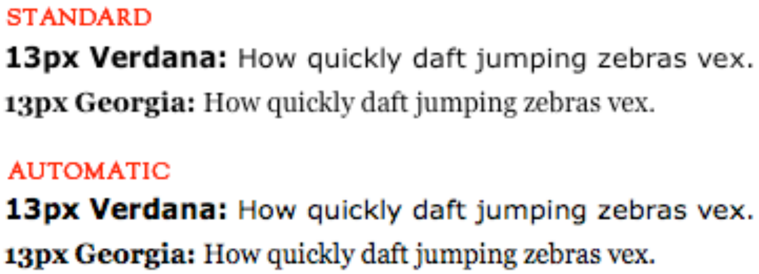
13px Georgia: How quickly daft jumping zebras vex.

AUTOMATIC

13px Verdana: How quickly daft jumping zebras vex.

13px Georgia: How quickly daft jumping zebras vex.

- **Firefox 3 in OS X** (inherits from operating system but with slightly enhanced kerning — most noticeable in the word "Georgia"):



STANDARD

13px Verdana: How quickly daft jumping zebras vex.

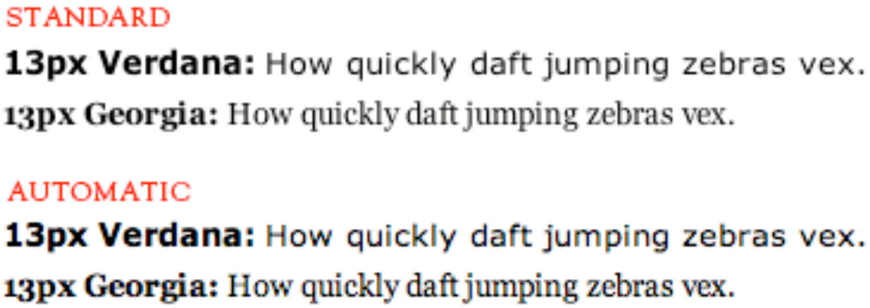
13px Georgia: How quickly daft jumping zebras vex.

AUTOMATIC

13px Verdana: How quickly daft jumping zebras vex.

13px Georgia: How quickly daft jumping zebras vex.

- **Safari 4 in OS X:**



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AUTOMATIC

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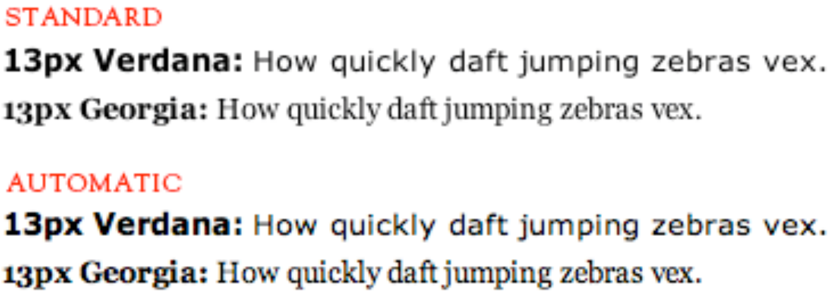
13px Georgia: How quickly daft jumping zebras vex.

- **Opera:**



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13px Verdana: How quickly daft jumping zebras vex.

13px Georgia: How quickly daft jumping zebras vex.

Conclusion

Though many advances have been made in rendering on-screen typography, most have been aimed at treating the symptoms and not the disease. Until everyone has a 200 PPI monitor sitting on their desk, it will be up to designers and developers to use the proper technologies to ensure legibility without degrading the design of the typeface.

10 Principles For Readable Web Typography

Matt Cronin

Readability is one of the more important aspects of Web design usability. Readable text affects how users process the information in the content. Poor readability scares readers away from the content. On the other hand, done correctly, readability allows users to efficiently read and take in the information in the text. You want users to be able to read your content and absorb it easily.

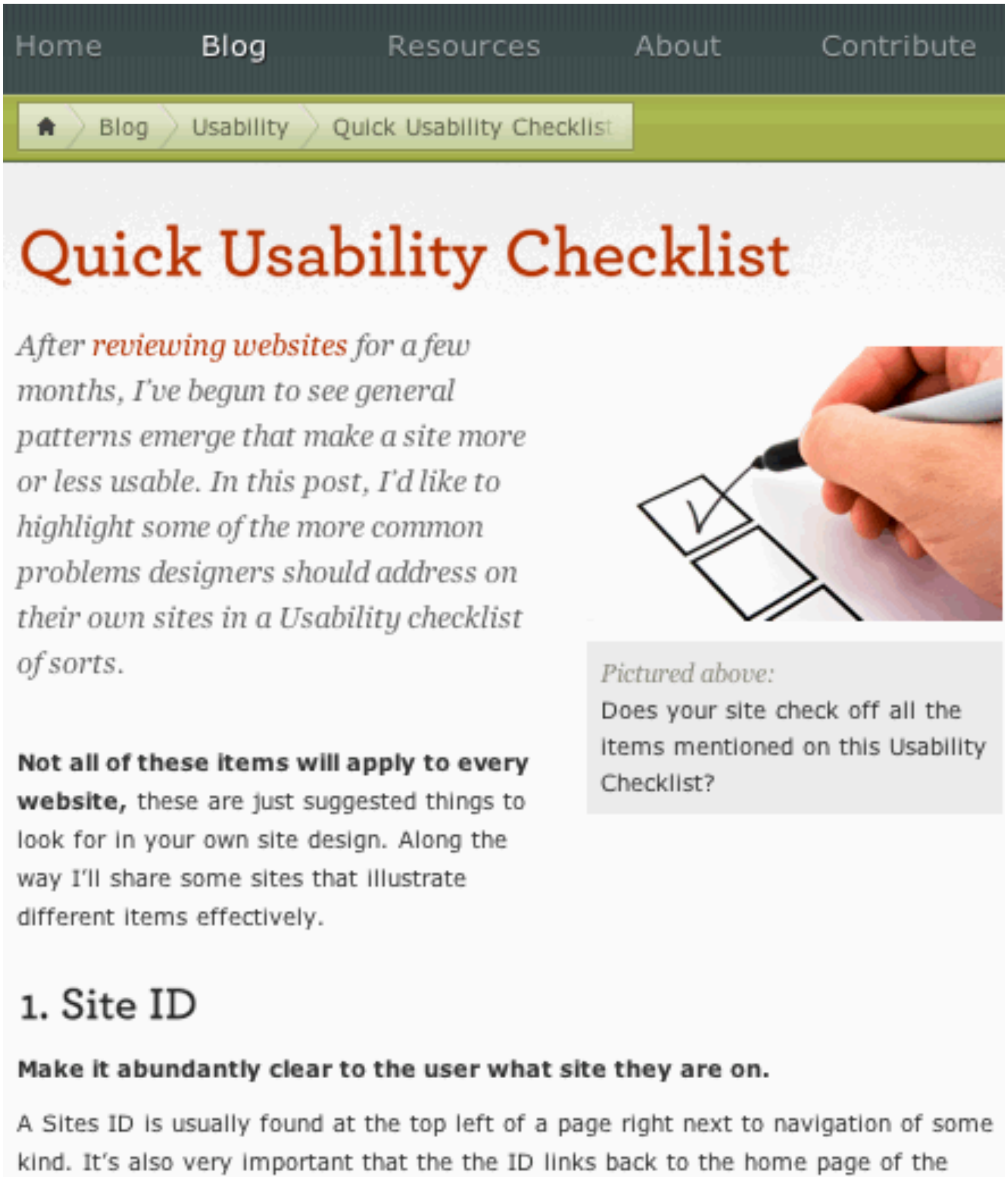
In this post, we'll explain some **web typography terms** and how they play into **readability**; we'll present numerous tips to help improve the readability of your content; and we'll showcase very readable Web sites, layouts and articles.

The Terms, And What Each Means For Readability

There are many factors that play into the readability of text. There are also a number of terms, all very important. Here are a few of the more common web typography terms and an explanation of how each term affects readability.

Hierarchy

Every typographic layout needs the essential element of hierarchy. Hierarchy defines how to read through content. It shows the user were to start reading and where to read through. It differentiates headers from body text. Although colors of text boxes can be used to contrast headers and body text, hierarchy refers to the difference in size between these elements. Hierarchy plays a huge part in how scannable a layout is. It is an important technique that needs to be mastered to achieve readable web typography.



Quick Usability Checklist

After reviewing websites for a few months, I've begun to see general patterns emerge that make a site more or less usable. In this post, I'd like to highlight some of the more common problems designers should address on their own sites in a Usability checklist of sorts.

Pictured above:
Does your site check off all the items mentioned on this Usability Checklist?

Not all of these items will apply to every website, these are just suggested things to look for in your own site design. Along the way I'll share some sites that illustrate different items effectively.

1. Site ID

Make it abundantly clear to the user what site they are on.

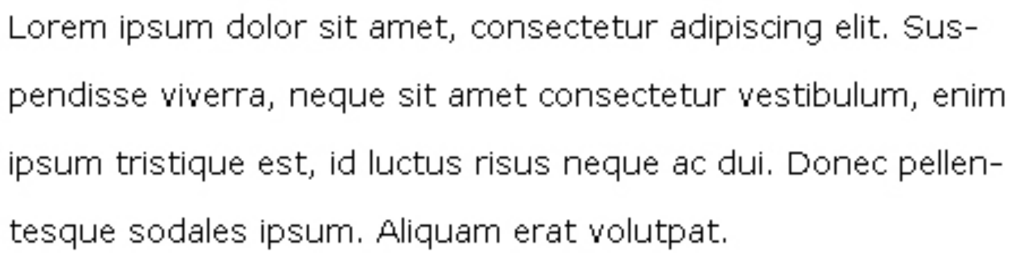
A Sites ID is usually found at the top left of a page right next to navigation of some kind. It's also very important that the the ID links back to the home page of the

UXBooth uses a very clean hierarchy to achieve readable web typography.

Contrast

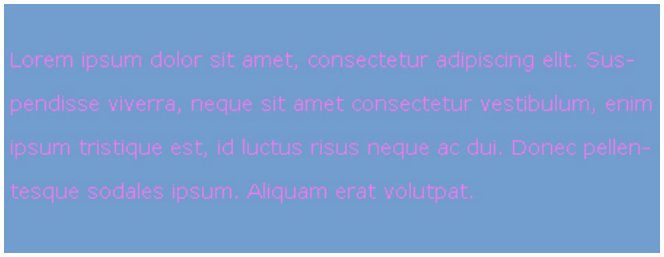
Contrast is the core factor in whether or not text is easy to read. Good contrasts will make text easy on the eyes, easy to scan quickly, and overall more readable. On the other hand, poor contrast will force the user to squint and make reading the body text almost painful, not to mention a lot slower.

As shown in the following illustration, black on white is **very readable**. Black on white is obviously the standard contrast colors, and to achieve readable content it is good to stay in the range of black-on-white contrast.



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse viverra, neque sit amet consectetur vestibulum, enim ipsum tristique est, id luctus risus neque ac dui. Donec pellentesque sodales ipsum. Aliquam erat volutpat.

This one, however, pink on blue, is **nearly impossible to read**. This example my be a little extreme, but it shows how such an awful contrast can have a major impact on the text. You probably won't see Web sites using such poor contrast, but it still shows why you need to be very smart about it.



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse viverra, neque sit amet consectetur vestibulum, enim ipsum tristique est, id luctus risus neque ac dui. Donec pellentesque sodales ipsum. Aliquam erat volutpat.

Line Height

Line height is a very common term meaning the space between individual lines of text. Line height is another factor in the readability of body text and even headers. Sufficient line height is especially important in Web design because it makes the text ultimately more scannable. Line height that is too short will cause users to squint while reading. If it is too large, the text will seem like separate bodies instead of grouped together as one. You'll find a rule of thumb for practical line heights in this article.

Letter Spacing

Like line height, letter spacing affects readability in web typography. Letter spacing is, as the name suggests, the space between each letter in a word. In print layout, negative letter spacing is a common technique to add a more fun feel to the layout, but it should never be used in body text. In any text, letter spacing is an obvious factor in legibility.

Line Length

Line length is often overlooked in web typography but should not be. Line length is, of course, the number of words per line. A good line length is one that allows the reader's eyes to flow from the end of one line to the beginning of the next very easily and naturally.

The Keys to Readable Typography

Achieving readability is relatively easy; all it takes is following a few key practices. A readable Web page can go a long way with your users, and readability has a huge impact on their experience. Designing for the web is all about making the user's experience as pleasant as possible. Here are 9 tips that will help you work towards readability.

1. User-Friendly Headers

Headers are a key element in typography, Web and print alike. As mentioned, they are part of the text hierarchy and a major factor in scannable content.

First off, header size is just as important as the size of the body text. Going too big with the header with a large amount of content can throw the user off balance when reading and cause them to lose their spot. It will ultimately ruin the flow of the content and be a distraction. Headers that are too small will ruin the hierarchy of the article, too. If the header is too small, it will not draw the user's attention as it should.

As a next step it is important to provide ample space between the header and body text.

2. Scannable Text

I have already mentioned "scannable" text many times, and you have surely heard it elsewhere. Scannable text goes hand in hand with readable text. Making copy scannable consists of good use of headers, hierarchy and focus points to guide the user through the content.

So, what makes copy scannable? Well, there are many factors, most of which have already been mentioned. Header size and position, body text size, text line height, text contrast and the way focus points are differentiated all impact how scannable copy is.

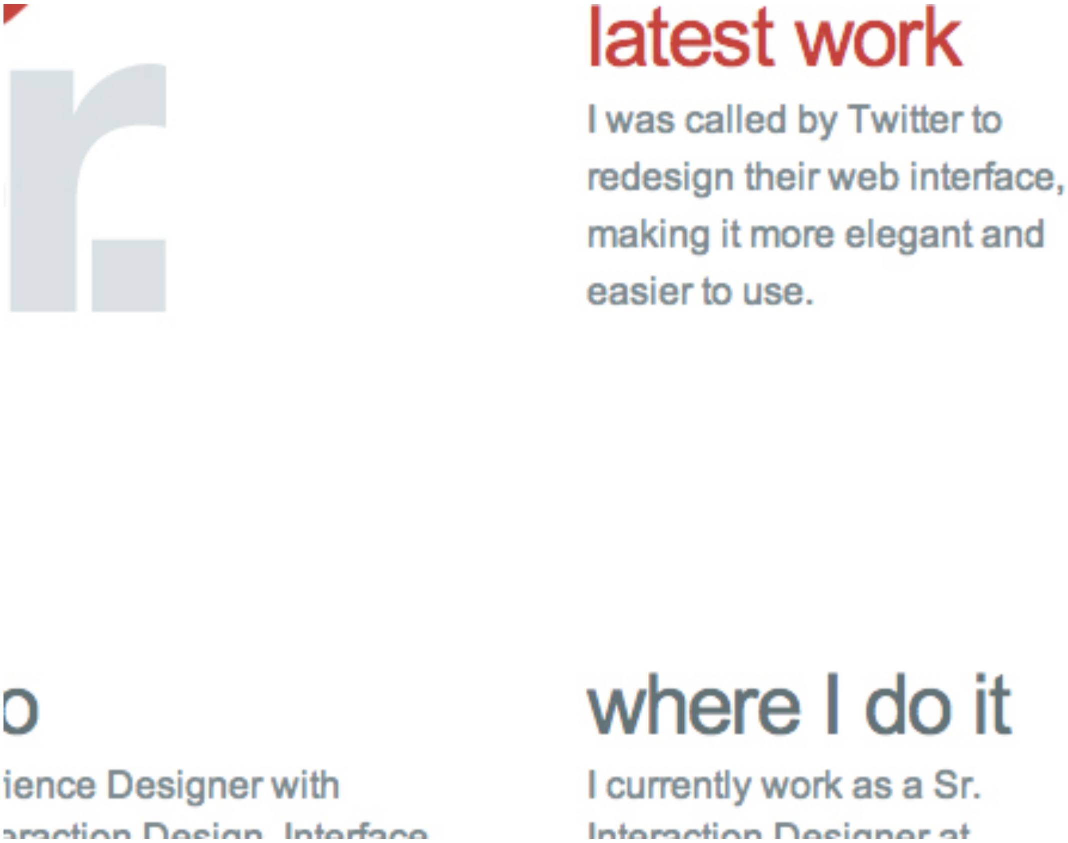
Focus points are certain elements or objects within the layout that attract, or are supposed to attract, the user's attention. This could be a header, a graphical element, a button, etc.

3. White Space

In content-heavy layouts, spacing contributes to the readability of content.

White space helps to offset large amounts of text and helps the user's eyes flow through the text. It also provides separation between elements in the layout, including graphics and text.

In the example below, white space and only white space is used to separate text elements. The layout is very clean and efficient. The user's eyes flow from text element to text element with ease, because of the large amounts of white space.



latest work

I was called by Twitter to redesign their web interface, making it more elegant and easier to use.

o

ience Designer with
araction Design, Interface

where I do it

I currently work as a Sr.
Interaction Designer at

4. Consistency

Consistency is often regarded as an important technique for usability, but it also applies to readability. Consistency in the hierarchy is important to a user-friendly layout. This means that all headers of the same importance in the hierarchy should be the same size, color and font. For example, all <h1> headers in an article should look identical. Why? This consistency provides users with a familiar focus point when they are scanning, and it helps to organize the content.

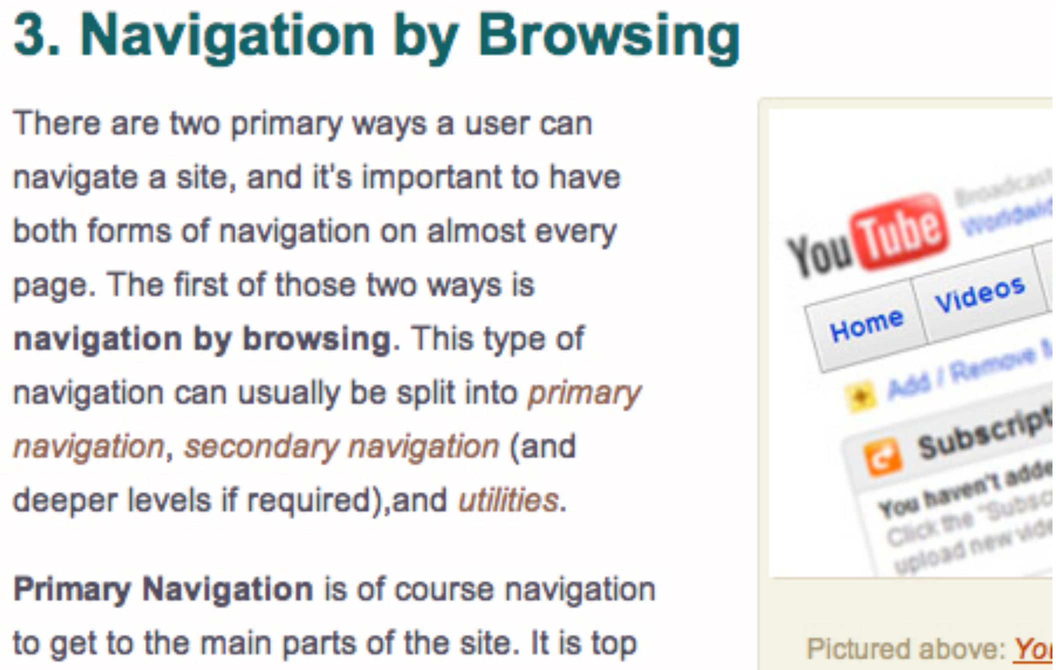
5. Density of Text

Density of text refers to the amount of words you place in one area. Density of content has a major impact on your content's readability. Density is affected by spacing options such as line height, letter spacing and text size. If you find a balance between all of these so that the content is neither too compact nor too widely spaced, you will have perfect density that is both readable and scannable.

6. Emphasis of Important Elements

Another key factor is emphasis of certain elements within the body content. This includes highlighting links, bolding important text and showing quotes. As mentioned, focus points are essential in web typography. By emphasizing these objects, you provide focus points for the user. These points and objects help break up monotonous text.

Scannable text is extremely important. By providing these focus points, you make the body text extremely scannable. Bolding key lines of text immediately attracts the user's eye and is therefore a very important element in presenting important information. Pictured below is an article from UXBooth. This article uses bolding and italics to point out important information in the article.



3. Navigation by Browsing

There are two primary ways a user can navigate a site, and it's important to have both forms of navigation on almost every page. The first of those two ways is **navigation by browsing**. This type of navigation can usually be split into *primary navigation*, *secondary navigation* (and deeper levels if required),and *utilities*.

Primary Navigation is of course navigation to get to the main parts of the site. It is top

This is a very readable article and very easy to scan for information.

7. Organization of Information

Believe it or not, the way you organize information in an article can strengthen readability. Users are guided with ease through content that is properly organized because information is easier to find. This veers into issues beyond the scope of this article but is still very important.

8. Clean Graphical Implementation

Every text body needs some sort of visual support, be it an image, icon, graph or illustration. Placing the graphic in the article can be challenging. Sufficient space is needed between the graphic and text.

If the graphical element is an image, then a clean border is a good idea for providing a clean separation from the text. Borders can help guide the user's eyes and are good for adding style to content. It is important, however, to keep borders in content simple. They should have a subtle color palette and shouldn’t be too large.

In the case of graphical elements such as icons and illustrations, space is the only separator that should be used. The content should move cleanly around the graphic without disrupting the text.

9. Use of Separators

Separators are a simple and easy way to divide text into sections in a clean and organized manner. They can be used to divide hierarchy elements, such as headers and body text. They can also be used to divide content into sections.

The simplest form of divider is a single line. These are most often used to divide hierarchy elements and are very useful for making subtle divisions that still play a big role in readability.

Another common way to divide content is to use boxes. Text boxes are excellent for separating unrelated content on a single page. They help move the user’s eyes through a complex layout. Below is an example of this on Pixelmator’s Web site. It uses boxes to separate content in a clean way. Notice how the boxes are defined by their background instead of a border.

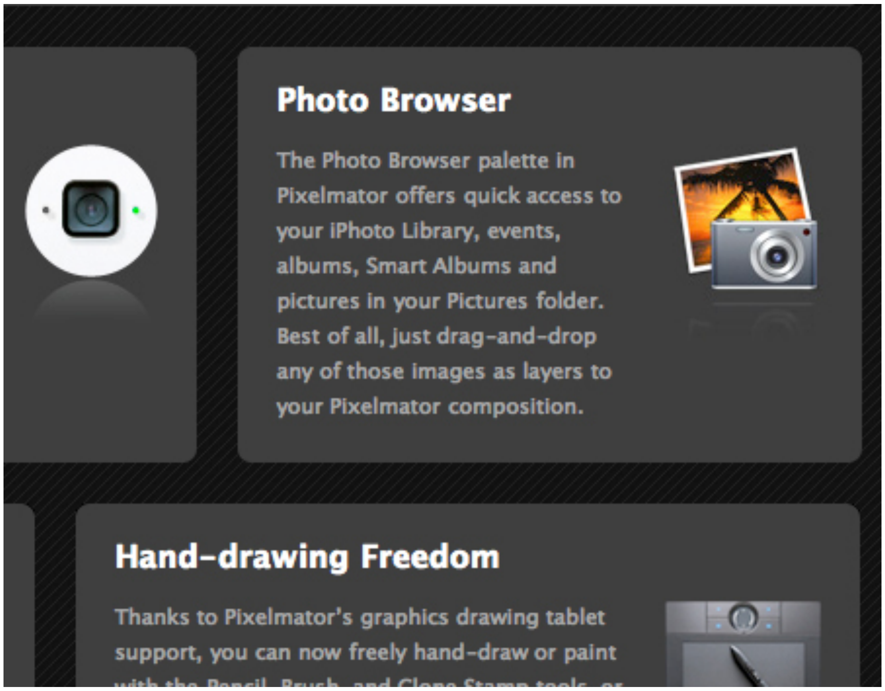


Photo Browser

The Photo Browser palette in Pixelmator offers quick access to your iPhoto Library, events, albums, Smart Albums and pictures in your Pictures folder. Best of all, just drag-and-drop any of those images as layers to your Pixelmator composition.

Hand-drawing Freedom

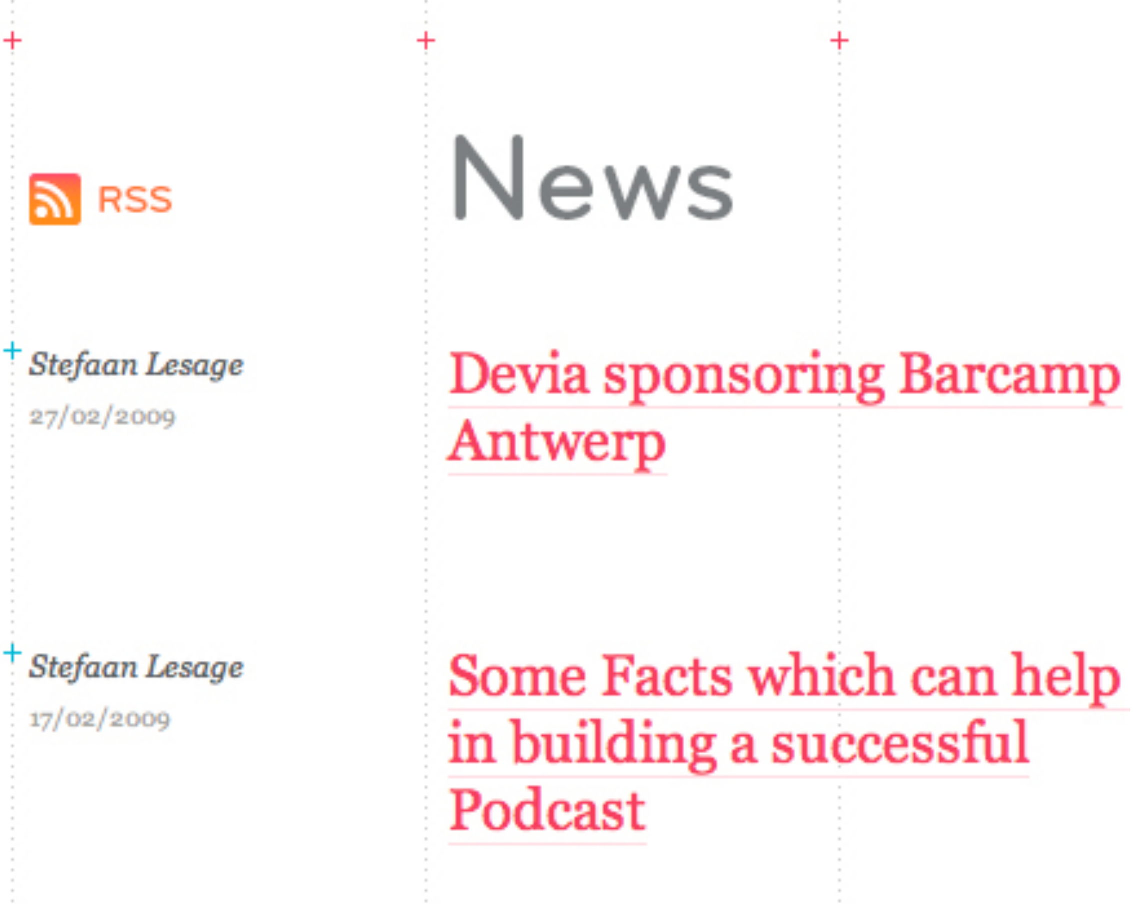
Thanks to Pixelmator's graphics drawing tablet support, you can now freely hand-draw or paint

10. Good Margins

You hear people say that you should use white space, but why? White space actually helps draw the user's eye to the text. The blank area (white space) forces the eye to focus on the text. So white space will influence the flow and readability of content. Margins are one of the best white space elements and support text elements well. Margins on either side will force the user's eye to focus inward on the core content of the article.

Margins also support the article in another way. They help separate content from the rest of the design and layout. Text shouldn't bleed into other layout elements, especially if it is a long article. Margins help define the article and its separation.

In the grid-based layout below, margins and only margins are used to set apart bodies of text. The result is a clean, clear and concise page.



RSS
News
Stefaan Lesage
27/02/2009
Devia sponsoring Barcamp Antwerp
Stefaan Lesage
17/02/2009
Some Facts which can help in building a successful Podcast

Effects To Give Typography Some Flair

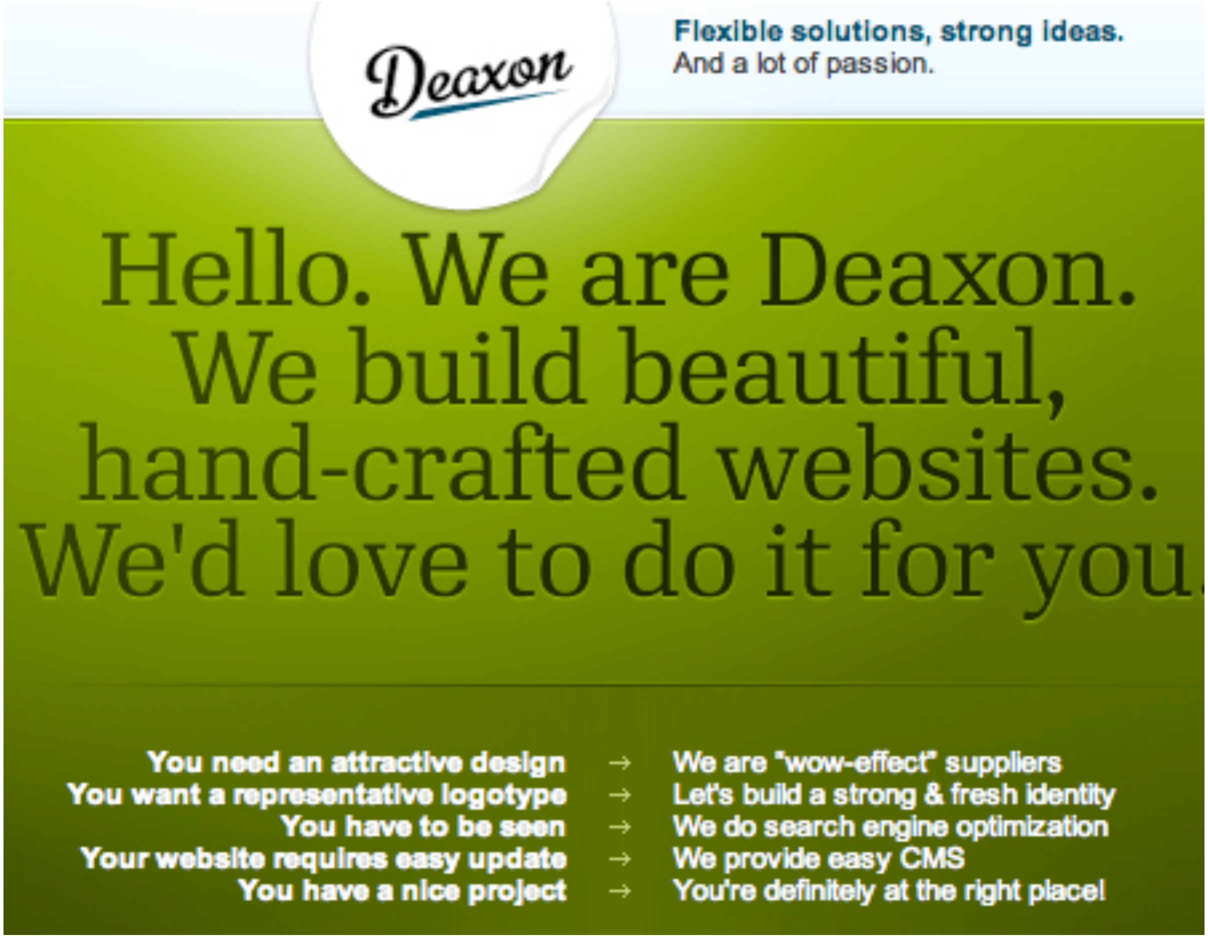
For the most part, text is text, simply words on a plain single-colored background. Not too complex, but it works. Occasionally, though, the text layout will need some styling and decoration. This may be a header or typography used in the overall design of the Web site (as opposed to the article content). No matter what the form, it is important to always stay within the limits of readability. Yes, it is essential to be creative and use decorative styling, but the typography must be legible or else it becomes almost useless.

Fancy Text

One good way to style typography is to use a fancy or unique font within the layout along with standard fonts. It is important to use simple and standard fonts for body text, but using fancy fonts elsewhere is an easy way to mix it up and add a little more to the theme. Using a single font throughout the entire Web site gets boring and, although readable, shouldn’t be done.

Letterpress

Another very common form of web typography styling is letterpress. The example below uses a letterpress technique to add depth and embellish the layout. It looks very nice and flows cleanly, and the text is still completely readable.



Flexible solutions, strong ideas.
And a lot of passion.

Hello. We are Deaxon.
We build beautiful,
hand-crafted websites.
We'd love to do it for you.

You need an attractive design → We are "wow-effect" suppliers
You want a representative logotype → Let's build a strong & fresh identity
You have to be seen → We do search engine optimization
Your website requires easy update → We provide easy CMS
You have a nice project → You're definitely at the right place!

Style the Background

Adding a nice background can be just as effective as styling text. By decorating the text body background, you are styling the text. Styling the background can be visually beautiful but can also reduce legibility. This is potentially a big problem but easily avoidable.

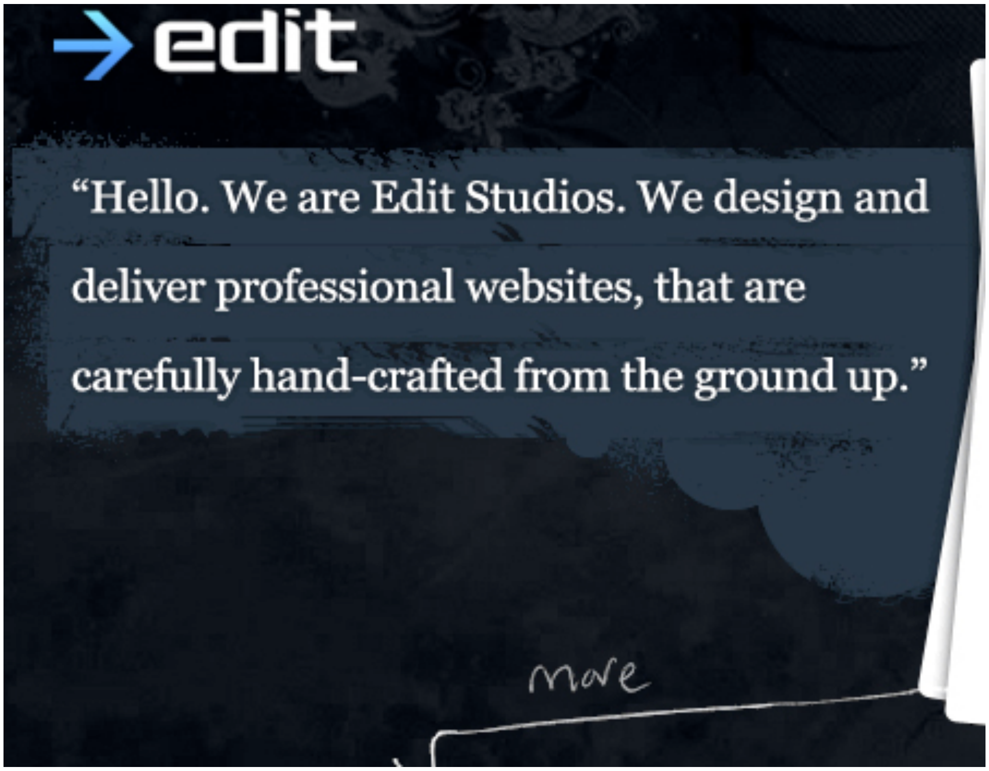
Keep the Contrast

First and foremost, it important to keep contrast within a readable range. For the background, use colors that are much subtler and duller than those of the text. This will allow the user's eye to focus on the text and not be distracted by the background.

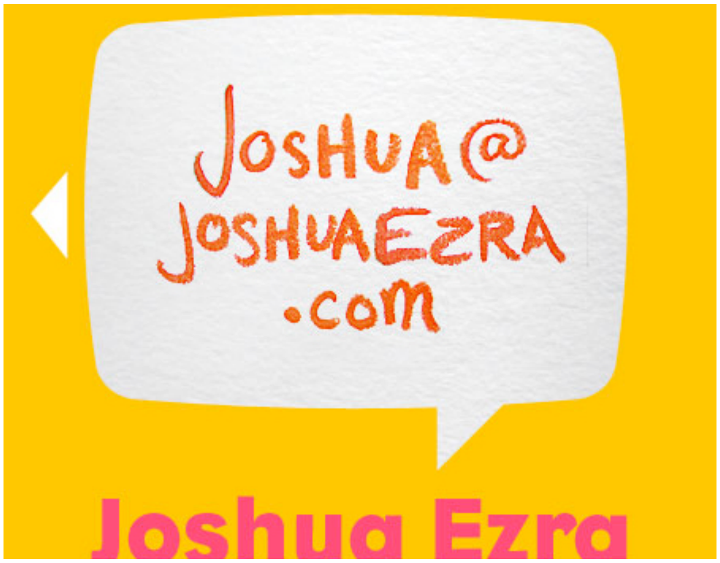
Textures Work Nicely

The best road to take with the background is to use a nice texture, which won't detract from the typography.

Here is a dark Web site with a good typographic style. The typography has a decorative background, but the contrast still works nicely. The text itself has no styling, but the background makes up for it.

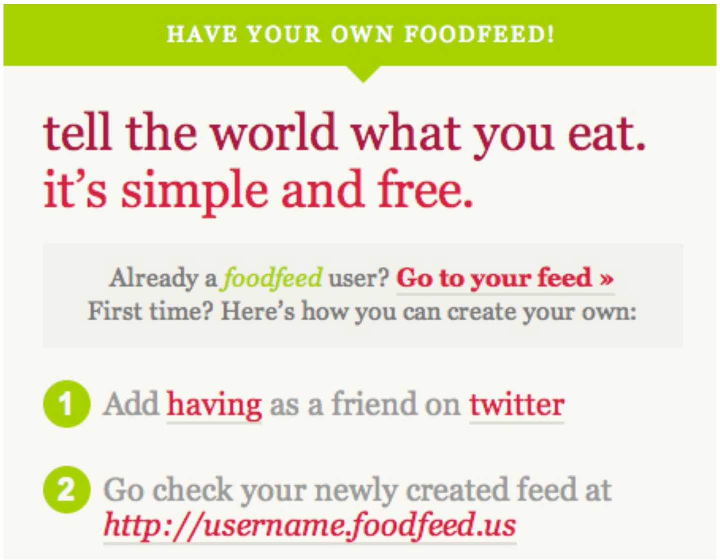

edit
"Hello. We are Edit Studios. We design and deliver professional websites, that are carefully hand-crafted from the ground up."
more

This is another great texture that supports the typography. The background texture resembles a canvas, and the typography takes on the form of a watercolor.



Link Styling

Within long text, links are one more type of focus point, and you should find a way to make them pop. In summary, the best way to do this is to use underlining, a different color than the body text, italics and a different font. You can combine these to great effect or just use one. The example below underlines and uses a different color for links.



HAVE YOUR OWN FOODFEED!

tell the world what you eat.
it's simple and free.

Already a *foodfeed* user? **Go to your feed »**
First time? Here's how you can create your own:

1 Add **having** as a friend on twitter

2 Go check your newly created feed at *http://username.foodfeed.us*

5 Principles and Ideas of Setting Type on the Web

Sean Hodge

There are some basic approaches, guidelines and goals to consider when working with type on the web. Overall, the medium of web typography involves readability, accessibility, usability, and brandability. On the web, these aspects function together to accomplish design's goals of communication and user interaction.

There are many ways to approach web typography in order to create effective and expressive results. Let's take a closer look at some **principles, rules and ideas for approaching web typography decisions** — you can use them as a starting point for learning how to achieve effective type setting on the web.

1. Approach Web Typography Decisions Systematically

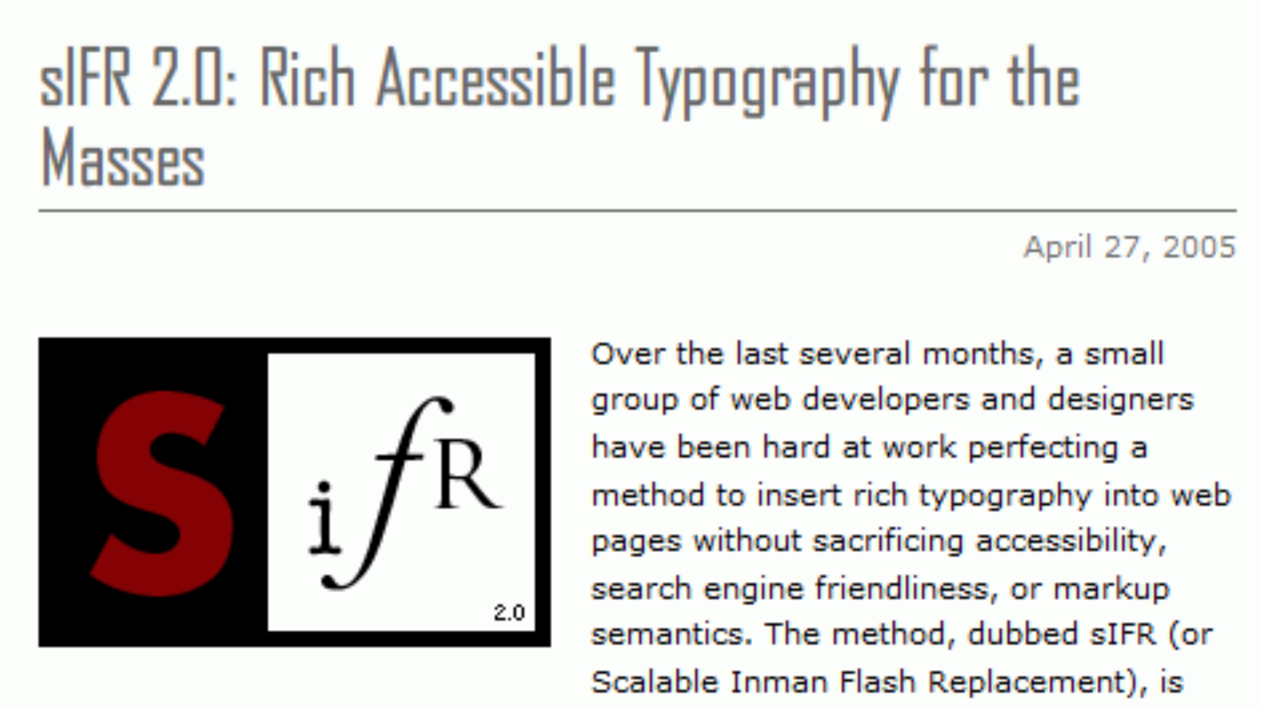
In web design every typographic decision needs to simultaneously accomplish a variety of results. Each headline you create should be set in text that is **legible** and **search engine friendly**, while the typeface should fit within the guidelines of the company's brand. Furthermore, typography should fit to the graphic style of the site and **meet user expectations** of being able to copy and paste text. As you can see, that's a wide array of needs for a headline to accomplish.

In some cases, this poses a problem. For instance, styling and branding guidelines may require from the designer to use specific typefaces which can't be used online directly. So a decision needs to be made:

- Deviate from the brand guidelines to maintain optimal search engine friendliness *or*
- use an image replacement solution which embeds the required font in an image (statically or dynamically) *or*

consider using sIFR, a rich Flash-based dynamic font embedding technique which allows not only for embedding fonts into content presentation but also interacting with them (almost) as you would do with plain text.

Further information on sIFR and other text replacement tools and techniques are covered by a separate article in this eBook.



sIFR 2.0: Rich Accessible Typography for the Masses

April 27, 2005

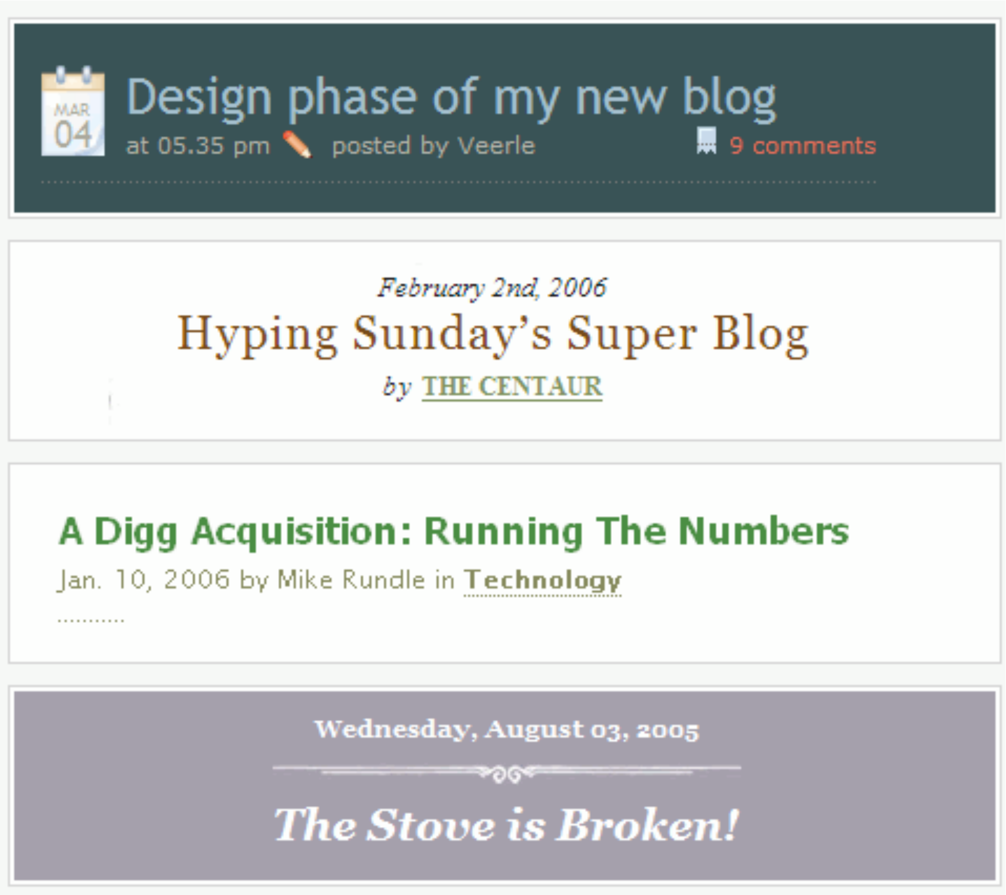
Over the last several months, a small group of web developers and designers have been hard at work perfecting a method to insert rich typography into web pages without sacrificing accessibility, search engine friendliness, or markup semantics. The method, dubbed sIFR (or Scalable Inman Flash Replacement), is

An introducing article about sIFR: sIFR 2.0: Rich Accessible Typography for the Masses

In many cases, the myriad of goals web typography needs to serve will be conflicting with each other. With each client and for each projects you need to prioritize and define **which goals are more important** than the others. Some clients will be more concerned with maintaining brand identity, and others will put search engine friendliness higher.

All typographic decisions function within the scope of the problem at hand. Different sites will have various needs. There isn't always one answer for each problem. It requires careful consideration of the strengths and weaknesses that each solution poses to the various areas that web typography effects.

As part of your research and studies look at how other sites handle the same issues that come up in your work. Typography For Headlines is a collection of links and screenshots of over 100 headlines around the web, each approaching this issue in a unique and creative way.



MAR 04 Design phase of my new blog
at 05.35 pm posted by Veerle 9 comments

February 2nd, 2006
Hyping Sunday's Super Blog
by THE CENTAUR

A Digg Acquisition: Running The Numbers
Jan. 10, 2006 by Mike Rundle in Technology

Wednesday, August 03, 2005
The Stove is Broken!

A screenshot from Christian Watson's gallery [Typography For Headlines](#).

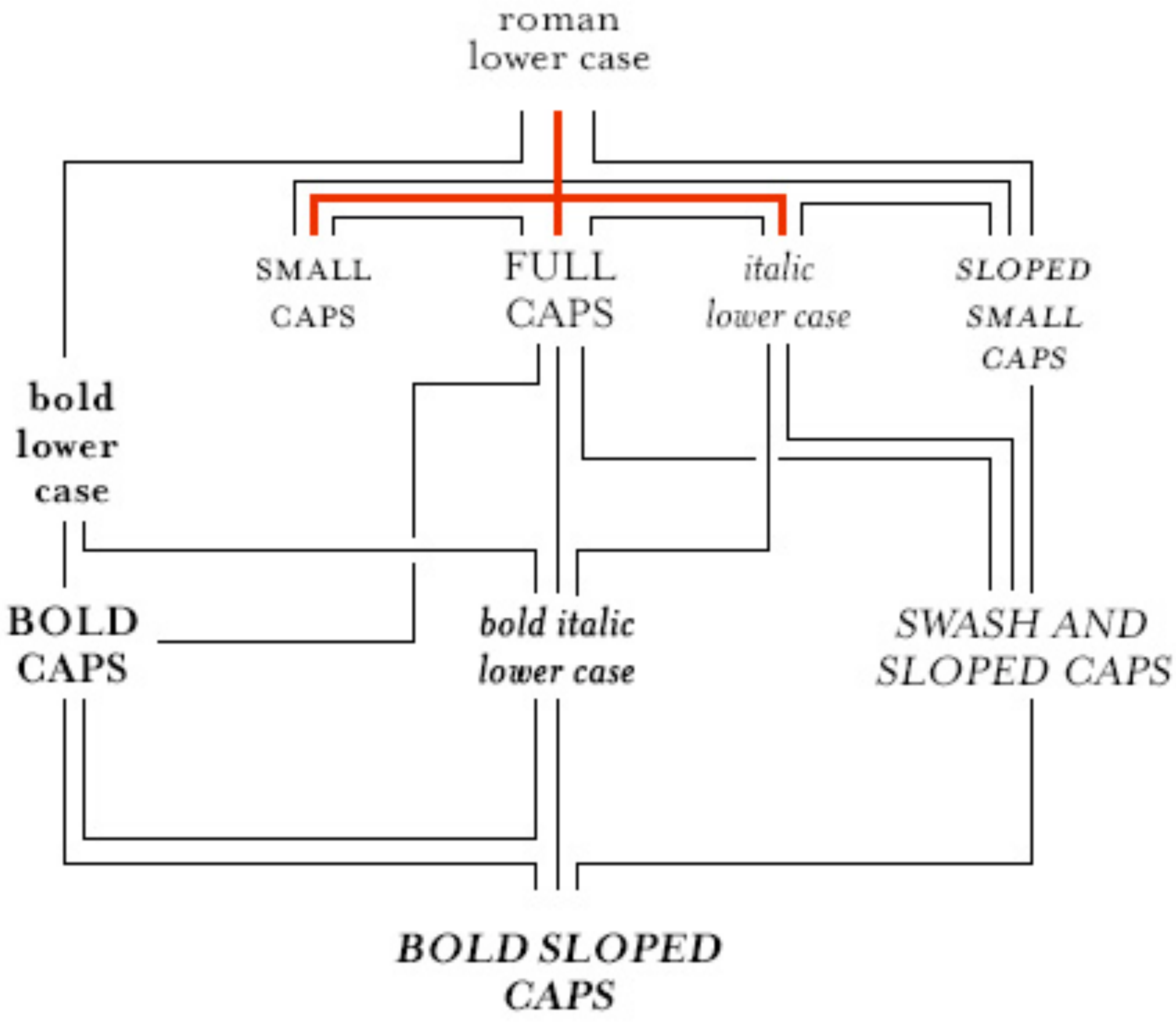
While typeface selection for headlines is a common issue that comes up in web design, using type on the web involves more than font selection. A systematic approach can be brought to many other facets as well. We'll move on to look at this in regard to information hierarchy next.

2. Utilize Information Hierarchy

There is more than one way to **define precedence** through the use of typography. First of all, the type size, color, weight, case, and whether the type is set normal or in italics will give the font greater or smaller importance. We also can’t ignore where the type is placed within our Web site layout.

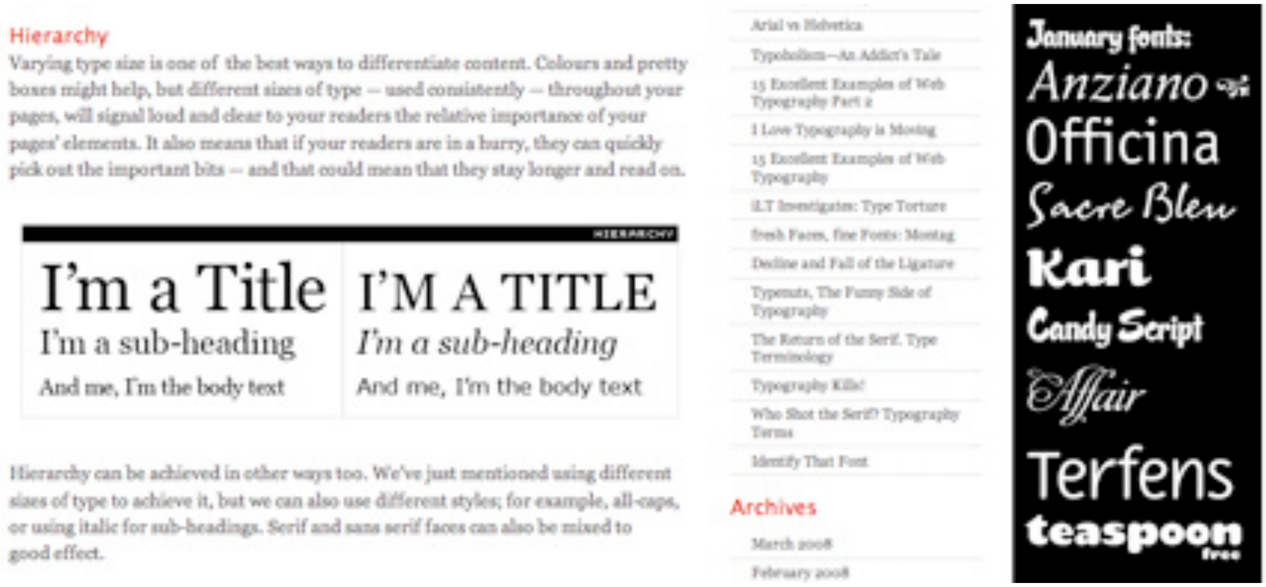
Mark Boulton has a great 5 part series on Typography called Five simple steps to better typography. In the 5th part of this series, he discusses weight. He gives a historical perspective on how weight works with typeface in creating a hierarchical order.

The article explains what text types users expect for different parts of a page. Below is a diagram of how one would hierarchically select type style based on historical perspective.



Users will react to type differently depending on **where it is placed** on the page. Type placed in the main body copy will have greater importance than type placed in a sidebar, with all other factors being equal. Large type in the sidebar will still call attention to itself and could move itself up in the pecking order. One needs to carefully balance type in the main body and sidebar area based on how you want the user to digest the information you present.

Consider the following screenshot from the article A Guide to Web Typography below. The image shows how type characteristics effect hierarchy. Also, notice how strongly the sidebar stands out. Although it's clearly separate from the main content, and therefore appears to be less important, it's hard not to be drawn to all the fonts which are presented on the black background. This design decision is effective as it makes you want to acutally click on the fonts.



Hierarchy

Varying type size is one of the best ways to differentiate content. Colours and pretty boxes might help, but different sizes of type — used consistently — throughout your pages, will signal loud and clear to your readers the relative importance of your pages' elements. It also means that if your readers are in a hurry, they can quickly pick out the important bits — and that could mean that they stay longer and read on.

HIERARCHY

I'm a Title
I'm a sub-heading
And me, I'm the body text

I'M A TITLE
I'm a sub-heading
And me, I'm the body text

Hierarchy can be achieved in other ways too. We've just mentioned using different sizes of type to achieve it, but we can also use different styles; for example, all-caps, or using italic for sub-headings. Serif and sans serif faces can also be mixed to good effect.

Arial vs Helvetica
Typoholism—An Addict's Tale
15 Excellent Examples of Web Typography Part 2
I Love Typography is Moving
15 Excellent Examples of Web Typography
ILT Investigates: Type Torture
fresh Faces, fine Fonts: Montag
Decline and Fall of the Ligature
Typenuts, The Funny Side of Typography
The Return of the Serif. Type Terminology
Typography Kills!
Who Shot the Serif? Typography Terms
Identify That Font

Archives

March 2008
February 2008

Even though those fonts are much bigger than the type set in the main body we are not confused about their function. They function as advertisements. We try to block them out as we read the article. Since the sidebar is eye-catching but passive, we experience no problems reading the article although we are subconsciously aware of the presence of the sidebar.

Placement has a large effect on how we react to the type on the web. Emerged conventions, such as a less importance given to sidebar, helps us to focus on the main content and guide us through the visual hierarch of the site. Conventions also helps us to treat content within various page areas differently.

3. Design for Optimal Flow

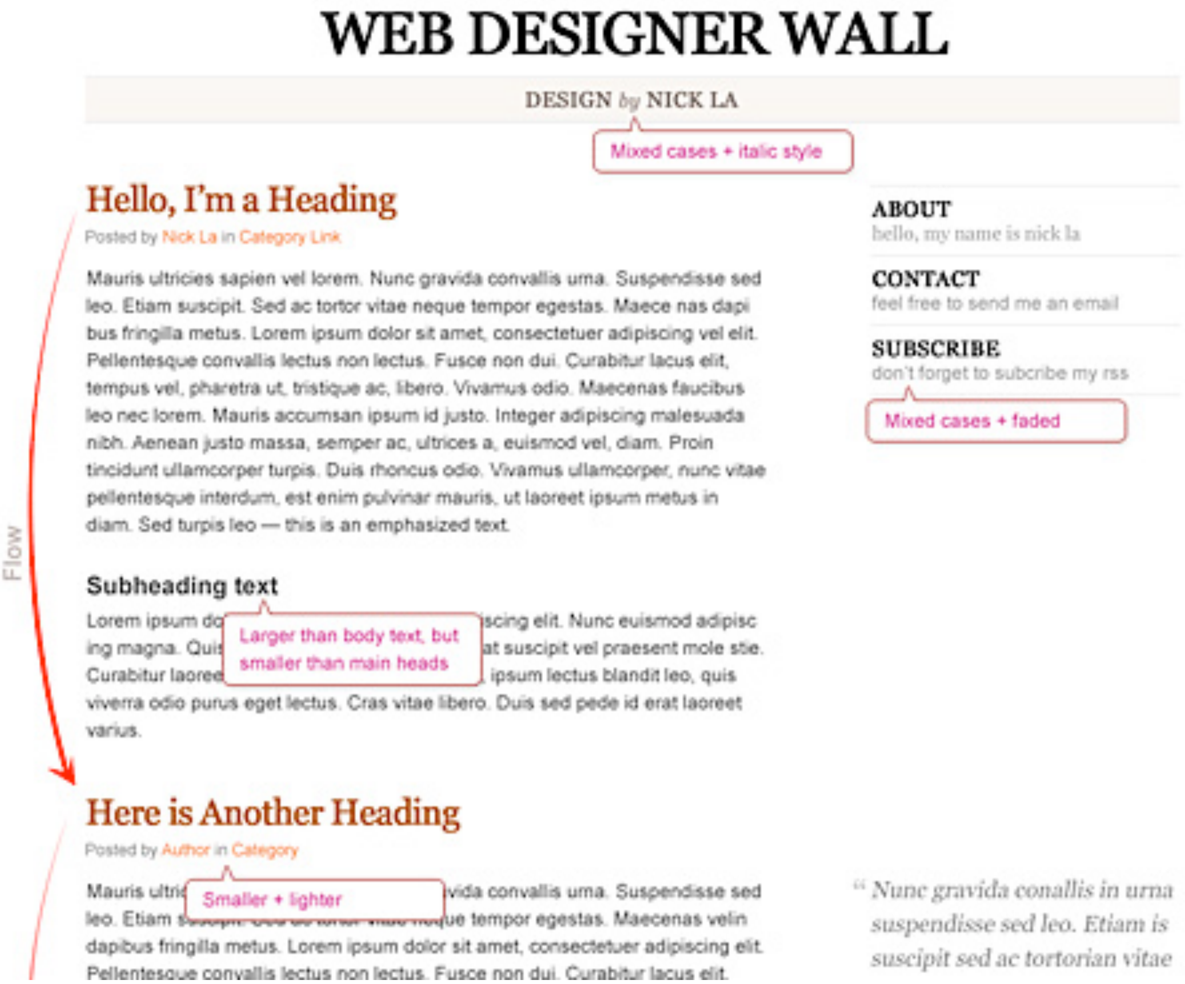
Hierarchy is important in page flow as well. It helps users to recognize the most important elements of the page as they scroll down through it. There are other typographic issues to look at regarding the flow. Spacing is a big part of the flow.

All these elements form the flow of the page:

- White space
- tracking
- leading
- indentation
- padding
- margins on elements

Nick La has written an article on Typographic Contrast and Flow. It uses the web Designer Wall site as an example of good flow. The explanation given of flow is concise:

> *"Space plays the most important part in maintaining flow of your design. Good use of space will tell the reader where to start, when to pause, where it ends, and what to do next."*



WEB DESIGNER WALL

DESIGN *by* NICK LA

Hello, I'm a Heading

Posted by Nick La in Category Link

Mauris ultricies sapien vel lorem. Nunc gravida convallis urna. Suspendisse sed leo. Etiam suscipit. Sed ac tortor vitae neque tempor egestas. Maece nas dapibus fringilla metus. Lorem ipsum dolor sit amet, consectetuer adipiscing vel elit. Pellentesque convallis lectus non lectus. Fusce non dui. Curabitur lacus elit, tempus vel, pharetra ut, tristique ac, libero. Vivamus odio. Maecenas faucibus leo nec lorem. Mauris accumsan ipsum id justo. Integer adipiscing malesuada nibh. Aenean justo massa, semper ac, ultrices a, euismod vel, diam. Proin tincidunt ullamcorper turpis. Duis rhoncus odio. Vivamus ullamcorper, nunc vitae pellentesque interdum, est enim pulvinar mauris, ut laoreet ipsum metus in diam. Sed turpis leo — this is an emphasized text.

Subheading text

Lorem ipsum do scing elit. Nunc euismod adipisc
ing magna. Quis at suscipit vel praesent mole stie.
Curabitur laoree ipsum lectus blandit leo, quis
viverra odio purus eget lectus. Cras vitae libero. Duis sed pede id erat laoreet varius.

Here is Another Heading

Posted by Author in Category

Mauris ultric vida convallis urna. Suspendisse sed
leo. Etiam s ue tempor egestas. Maecenas velin
dapibus fringilla metus. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Pellentesque convallis lectus non lectus. Fusce non dui. Curabitur lacus elit.

ABOUT
hello, my name is nick la

CONTACT
feel free to send me an email

SUBSCRIBE
don't forget to subcribe my rss

“ *Nunc gravida conallis in urna suspendisse sed leo. Etiam is suscipit sed ac tortorian vitae*

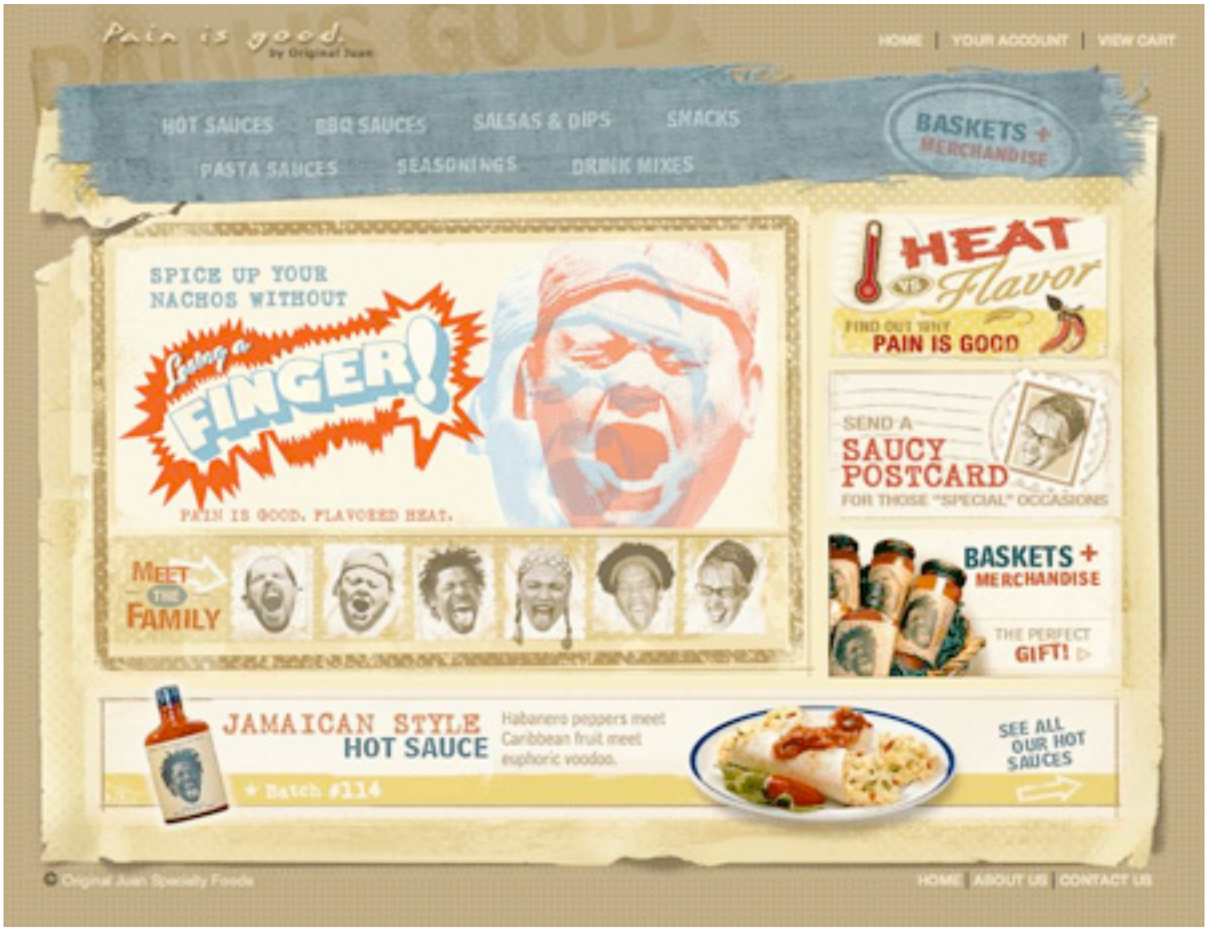
Mixed cases + italic style
Mixed cases + faded
Flow
Larger than body text, but smaller than main heads
Smaller + lighter

Ultimately, it's up to the designer to create good flow. Concentrate on each element of spacing and hierarchy. Then review how they work together as a whole. Take a closer look at the image above to get an idea of how elements work together to create a good flow.

4. Maintain Legibility Within the Presence of Branding

In order for a Web site to stand out the visual design of the site needs to be of **high quality**. In some cases, this takes the form of an elaborate design. With the growing popularity of illustrative and heavily textured sites, the need to make sure that typography is optimally chosen remains particularly important. Let's review a few sites that use grunge design and texture elements. We've looked at these sites before in the article The Secrets Of Grunge Design, but not in this way.

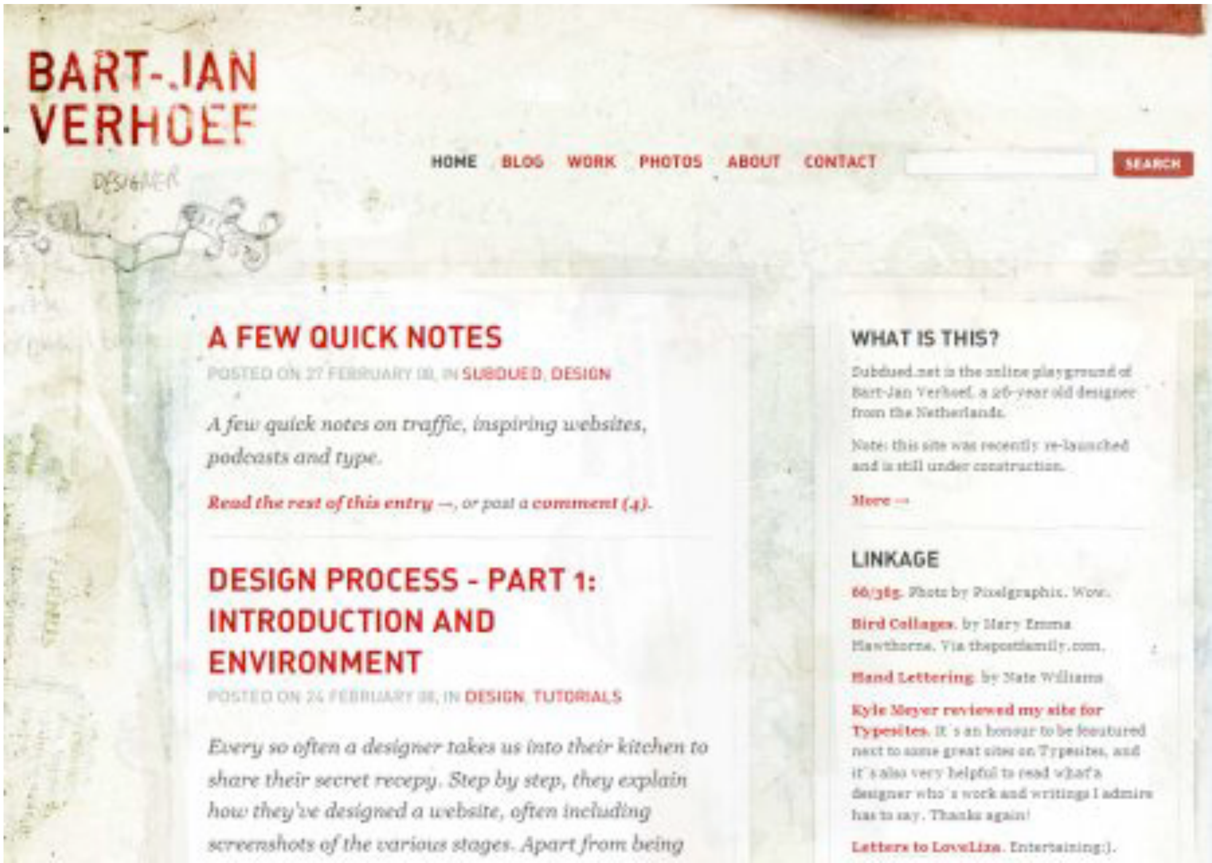
In the Web site Pain is Good, the company's brand is dominating the page (see example below). Most of the text on the page has been replaced with images. This allows the designer to take advantage of brand identity fully.



When embedded in images, fonts can be used in a variety of creative ways. The designer has strongly emphasized the brand compromising use of plain text which may hinder search engine success. Also, the top navigation is unusual. There is a low contrast in the navigation elements. It works, but could be improved.

Bart-Jan Verhoef's portfolio focuses on text rather than on visual elements. There are a few carefully selected brand and design elements converted to images, but a large percentage of the text is kept as web text. The mood of the design is created with background images, while the text remains functional.

This is a way to create a grunge design while meeting user needs well. Look back at this design after reviewing the „Treat Text as a User Interface" section coming up, as it does an excellent job of that.



A FEW QUICK NOTES

POSTED ON 27 FEBRUARY 08, IN SUBDUED, DESIGN

A few quick notes on traffic, inspiring websites, podcasts and type.

Read the rest of this entry →, or post a comment (4).

DESIGN PROCESS - PART 1: INTRODUCTION AND ENVIRONMENT

POSTED ON 24 FEBRUARY 08, IN DESIGN, TUTORIALS

Every so often a designer takes us into their kitchen to share their secret recepy. Step by step, they explain how they've designed a website, often including screenshots of the various stages. Apart from being

WHAT IS THIS?

Subdued.net is the online playground of Bart-Jan Verhoef, a 26-year old designer from the Netherlands.

Note: this site was recently re-launched and is still under construction.

More →

LINKAGE

66/365. Photo by Pixelgraphix. Wow.

Bird Collages, by Mary Emma Hawthorne. Via thepostfamily.com.

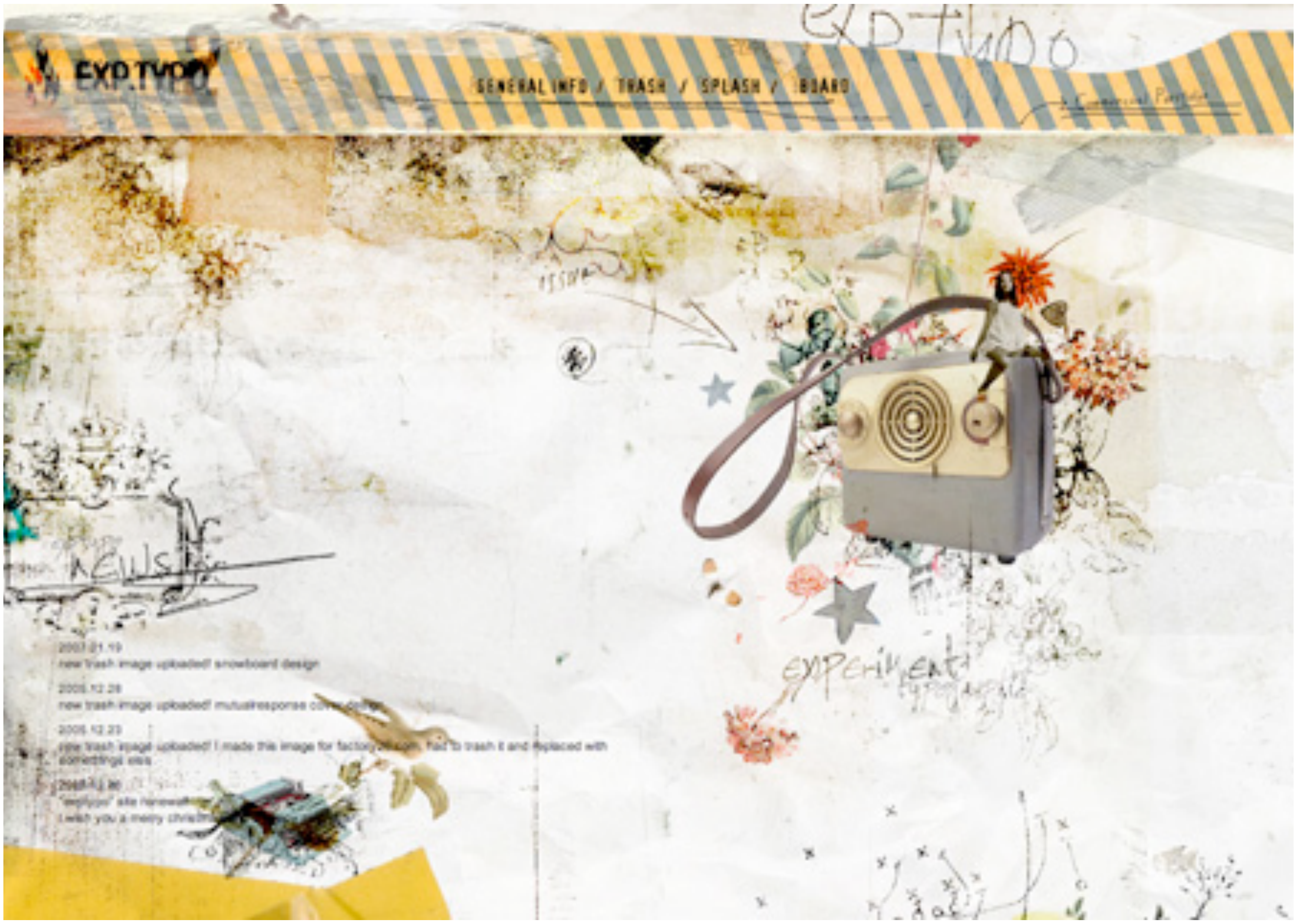
Hand Lettering by Nate Williams

Kyle Meyer reviewed my site for Typesites. It's an honour to be featured next to some great sites on Typesites, and it's also very helpful to read what a designer who's work and writings I admire has to say. Thanks again!

Letters to LoveLiza. Entertaining:).

Splendid example of beautiful and legible design: www.subdued.net

Of course, designers and artists will continue to experiment with the boundaries of legibility. The best place for extreme experiments is in personal art projects, like the site EXP Typo below. Notice how the text in the bottom left hand corner is illegible as it crosses over the old typewriter illustration.



2007.01.10
new trash image uploaded! snowboard design

2006.12.28
new trash image uploaded! mutualresponse cover design

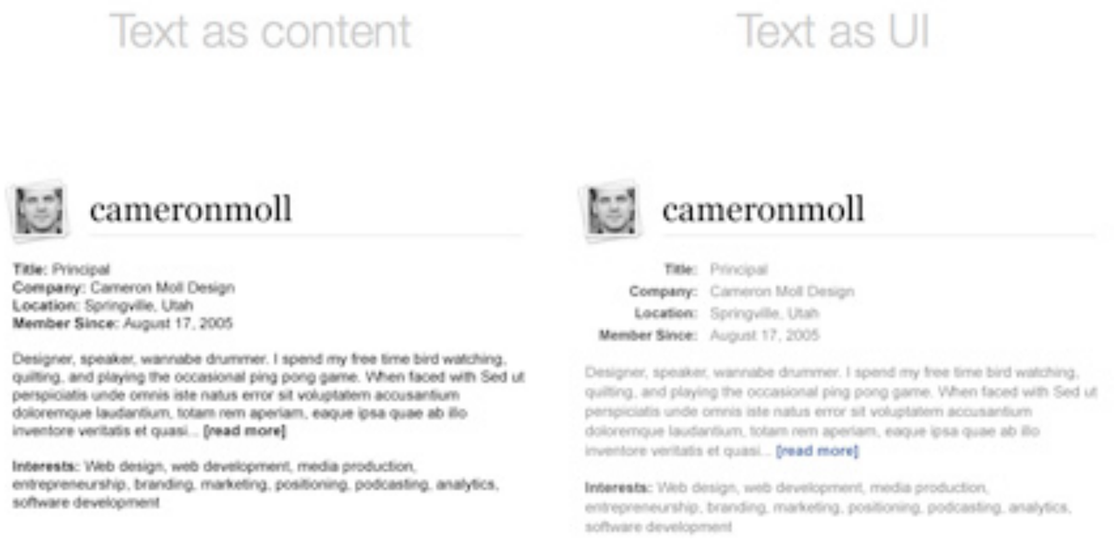
2006.12.23
new trash image uploaded! I made this image for factory[illegible], had to trash it and replaced with something else

[illegible]
"exp.typo" site renewal [illegible]
I wish you a merry christmas [illegible]

5. Treat Text as a User Interface

Text within interfaces is extremely important. In the book Getting Real from 37 Signals (available for free), the author states how "every letter matters." Word choice within user interfaces can make or break the functionality of the site. How those words are presented is equally important. Letterforms that are not styled give no indication as to what users should interact with.

Cameron Moll mentions the concept of treating text as a user interface in his article Nine skills that separate good and great designers. There is an accompanying presentation called **Essential Web Skills** that was done at Webmaster Jam in Dallas Texas. In this presentation, he describes how text is a fundamental part of the user interface. He also mentions that text makes an interface more *"accessible and digestible."*



Text as content

cameronmoll

Title: Principal
Company: Cameron Moll Design
Location: Springville, Utah
Member Since: August 17, 2005

Designer, speaker, wannabe drummer. I spend my free time bird watching, quilting, and playing the occasional ping pong game. When faced with Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi... **[read more]**

Interests: Web design, web development, media production, entrepreneurship, branding, marketing, positioning, podcasting, analytics, software development

Text as UI

cameronmoll

Title: Principal
Company: Cameron Moll Design
Location: Springville, Utah
Member Since: August 17, 2005

Designer, speaker, wannabe drummer. I spend my free time bird watching, quilting, and playing the occasional ping pong game. When faced with Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi... **[read more]**

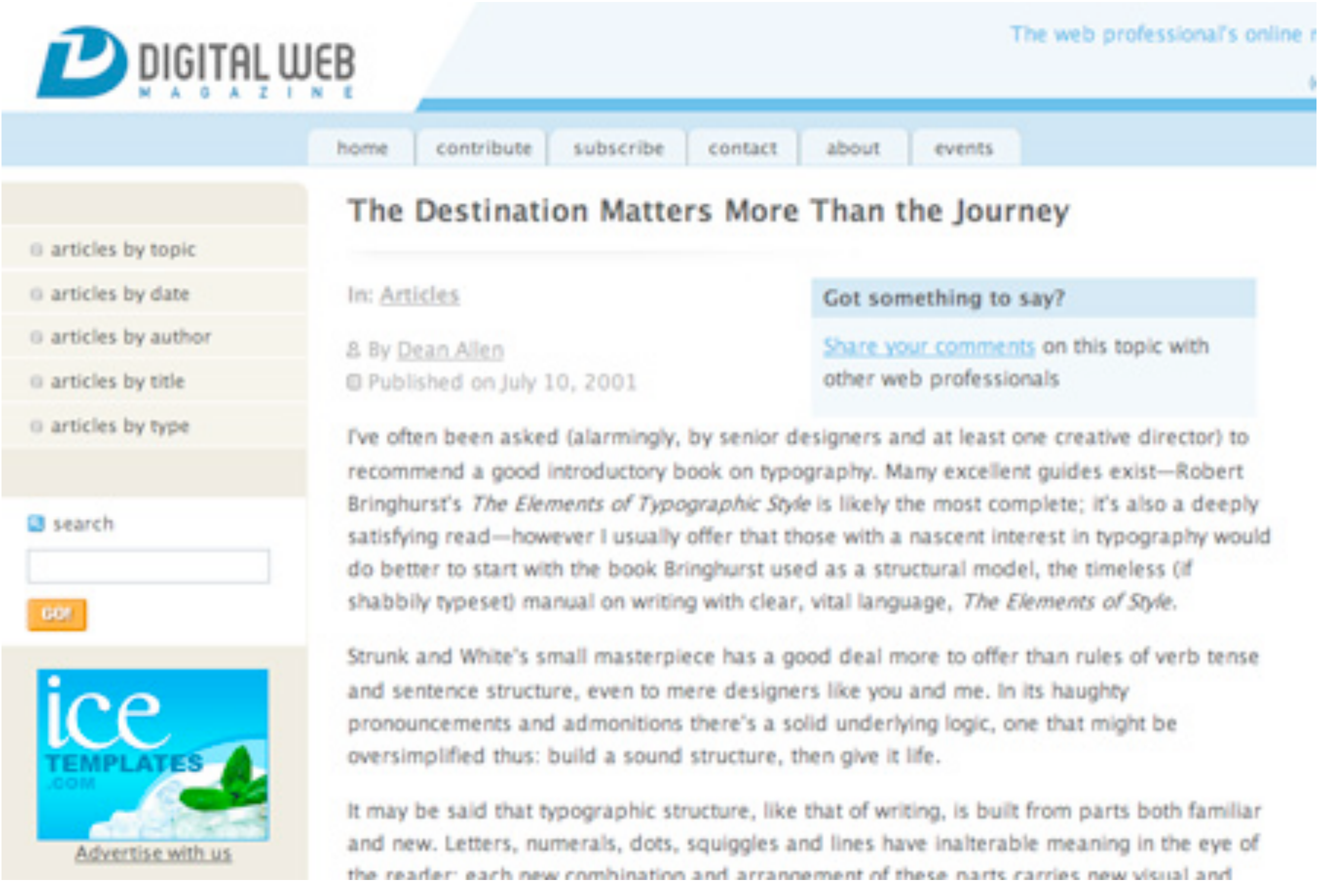
Interests: Web design, web development, media production, entrepreneurship, branding, marketing, positioning, podcasting, analytics, software development

The image above is an example he uses of **text being used as a user interface**. On the left you'll find an unformatted text. On the right you'll find the text which was given a function in the user interface. Notice how the color and weight of the text differ. There is an ample spacing between paragraphs and within lines. Links are made to stand out and are easy to identify. To view the original of this before and after image you'll need to download the presentation from Cameron's site.

Further Web Typography Resources

1. The Destination Matters More Than the Journey

This is a classic article on web typography over on Digital Web. It reminds us of the need to help users navigate through Web sites by using well chosen typography, that is both fitting for the medium, and grounded in a historical understanding of how to use type. It provides plenty of practical typographic advice, while lamenting "hack designers" and University design departments that lack "classic" typographic curriculum



The Destination Matters More Than the Journey

In: Articles

By Dean Allen
Published on July 10, 2001

Got something to say?

Share your comments on this topic with other web professionals

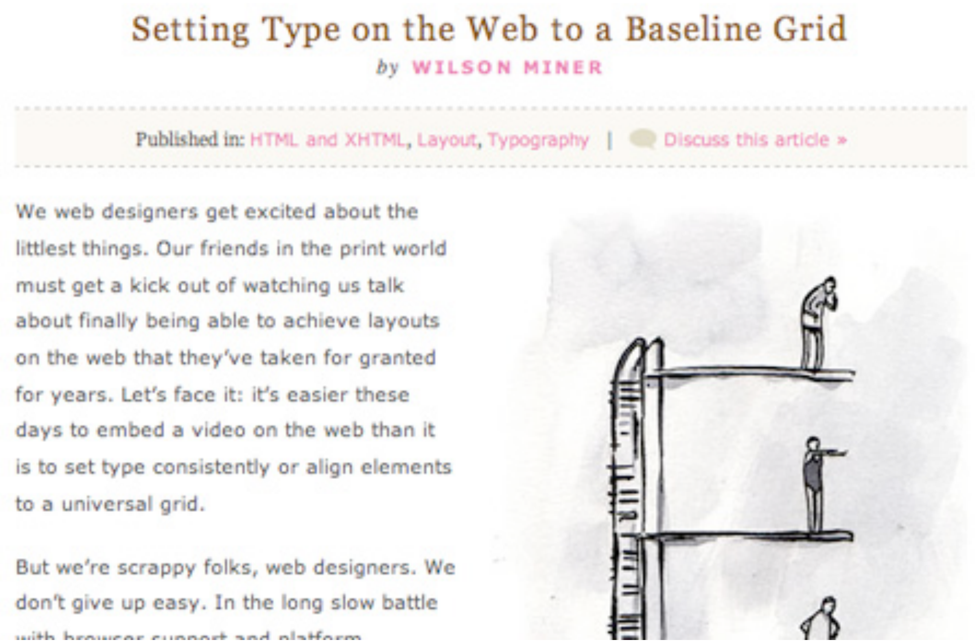
I've often been asked (alarmingly, by senior designers and at least one creative director) to recommend a good introductory book on typography. Many excellent guides exist—Robert Bringhurst's *The Elements of Typographic Style* is likely the most complete; it's also a deeply satisfying read—however I usually offer that those with a nascent interest in typography would do better to start with the book Bringhurst used as a structural model, the timeless (if shabbily typeset) manual on writing with clear, vital language, *The Elements of Style*.

Strunk and White's small masterpiece has a good deal more to offer than rules of verb tense and sentence structure, even to mere designers like you and me. In its haughty pronouncements and admonitions there's a solid underlying logic, one that might be oversimplified thus: build a sound structure, then give it life.

It may be said that typographic structure, like that of writing, is built from parts both familiar and new. Letters, numerals, dots, squiggles and lines have inalterable meaning in the eye of the reader; each new combination and arrangement of these parts carries new visual and

2. Setting Type on the web to a Baseline Grid

This article reviews issues with aligning elements to a baseline grid with CSS and provides a solution. The solution is an attempt to take a common print based grid technique and apply it to the web. "We can apply the same principles of proportion and balance to the type within those columns by borrowing another technique from our print brethren: the baseline grid." This solution helps to control the flow of the page.



Setting Type on the Web to a Baseline Grid

by WILSON MINER

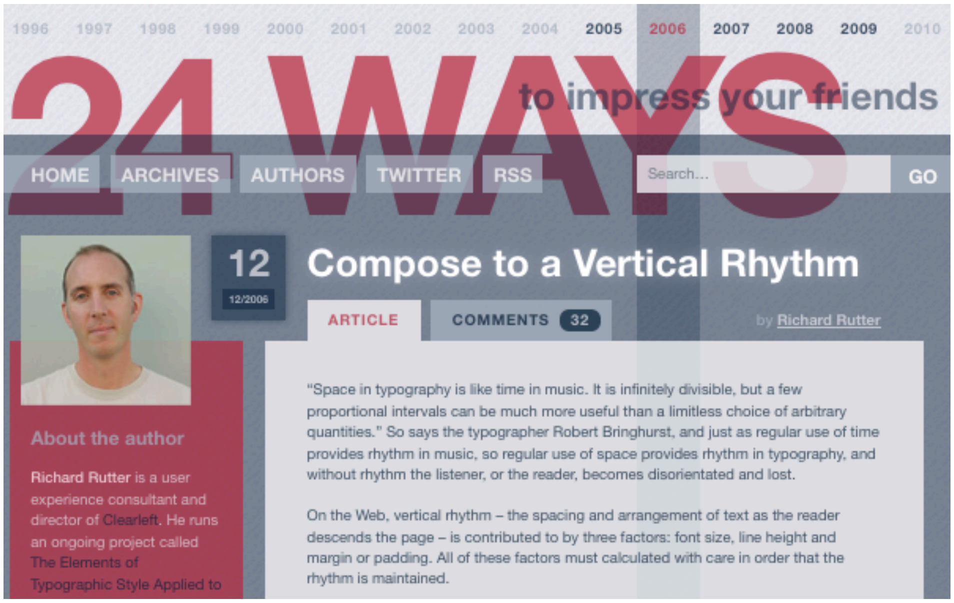
Published in: HTML and XHTML, Layout, Typography | Discuss this article »

We web designers get excited about the littlest things. Our friends in the print world must get a kick out of watching us talk about finally being able to achieve layouts on the web that they've taken for granted for years. Let's face it: it's easier these days to embed a video on the web than it is to set type consistently or align elements to a universal grid.

But we're scrappy folks, web designers. We don't give up easy. In the long slow battle with browser support and platform

[Compose to a Vertical Rhythm]

This article reviews a solution to achieving a vertical rhythm on Web site designs. "On the web, vertical rhythm – the spacing and arrangement of text as the reader descends the page – is contributed to by three factors: font size, line height and margin or padding. All of these factors must calculated with care in order that the rhythm is maintained."



Compose to a Vertical Rhythm

by Richard Rutter

About the author

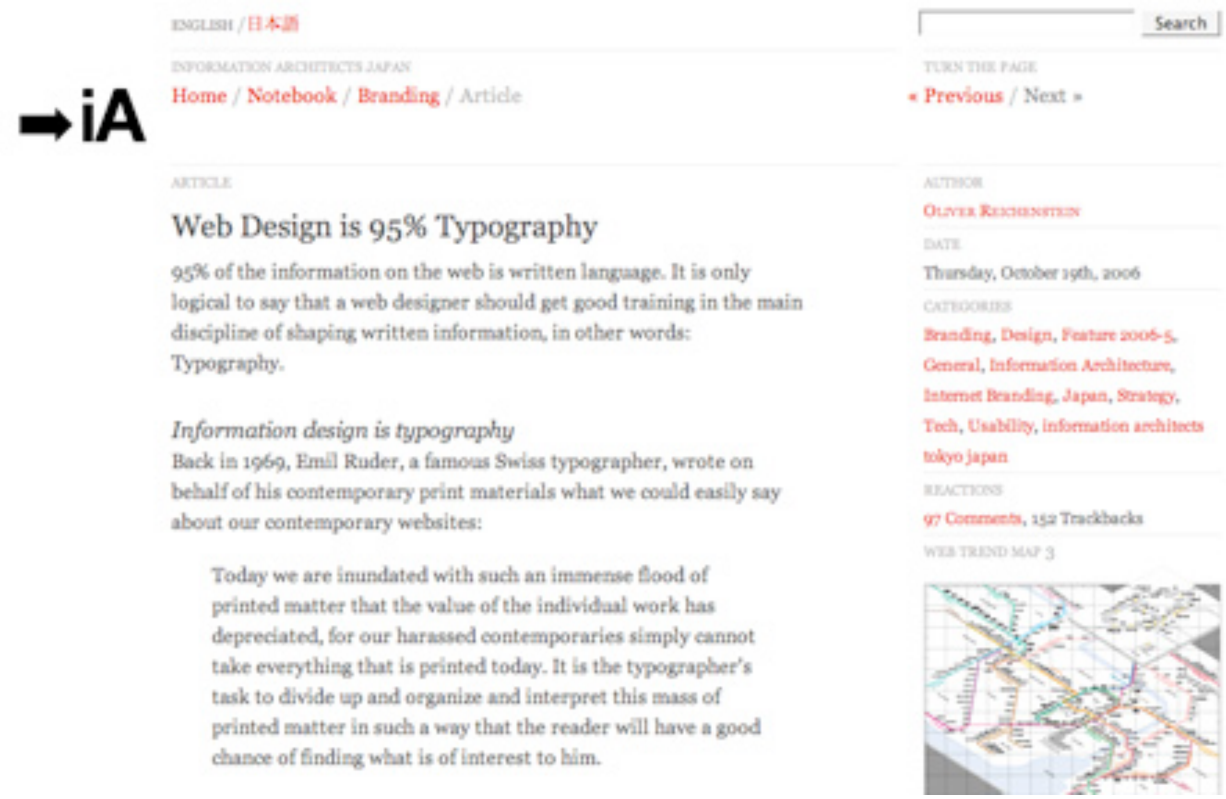
Richard Rutter is a user experience consultant and director of Clearleft. He runs an ongoing project called The Elements of Typographic Style Applied to

"Space in typography is like time in music. It is infinitely divisible, but a few proportional intervals can be much more useful than a limitless choice of arbitrary quantities." So says the typographer Robert Bringhurst, and just as regular use of time provides rhythm in music, so regular use of space provides rhythm in typography, and without rhythm the listener, or the reader, becomes disorientated and lost.

On the Web, vertical rhythm – the spacing and arrangement of text as the reader descends the page – is contributed to by three factors: font size, line height and margin or padding. All of these factors must calculated with care in order that the rhythm is maintained.

Web Design is 95% Typography

This is a passionate article on web typography. It makes some bold statements about how important web typography is and created a heated debate. The follow up article to this post is *95% Typography? Reactions*, in which the author reviews the issues brought up in the debate.



ENGLISH / 日本語

INFORMATION ARCHITECTS JAPAN

Home / Notebook / Branding / Article

ARTICLE

Web Design is 95% Typography

95% 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.

Information design is typography

Back in 1969, Emil Ruder, a famous Swiss typographer, wrote on behalf of his contemporary print materials what we could easily say about our contemporary websites:

> Today we are inundated with such an immense flood of printed matter that the value of the individual work has depreciated, for our harassed contemporaries simply cannot take everything that is printed today. It is the typographer's task to divide up and organize and interpret this mass of printed matter in such a way that the reader will have a good chance of finding what is of interest to him.

Search

TURN THE PAGE

« Previous / Next »

AUTHOR

Oliver Reichenstein

DATE

Thursday, October 19th, 2006

CATEGORIES

Branding, Design, Feature 2006-5, General, Information Architecture, Internet Branding, Japan, Strategy, Tech, Usability, information architects tokyo japan

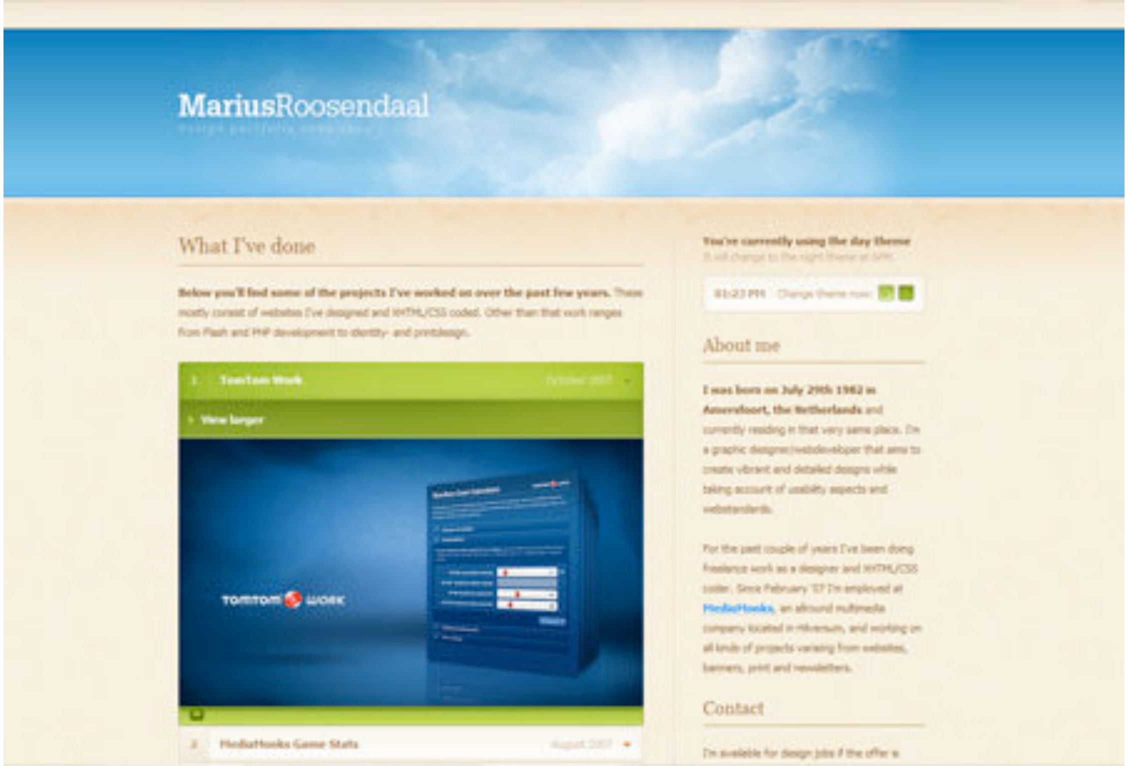
REACTIONS

97 Comments, 152 Trackbacks

WEB TREND MAP 3

Nine Essential Principles for Good Web Design

Web design can be deceptively difficult. How to combine usability with visual coherence, effective design and excellent technical performance? Collis Ta'eed explores 9 essential principles for good web design. Among the principles precedence, spacing, navigation, usability, alignment, clarity and consistency are discussed.


MariusRoosendaal
design portfolio

What I've done

Below you'll find some of the projects I've worked on over the past few years. These mostly consist of websites I've designed and XHTML/CSS coded. Other than that work ranges from Flash and PHP development to identity- and printdesign.

1 TomTom Work October 2007
View larger
TomTom WORK
2 MediaMonks Game Stats August 2007

You're currently using the day theme
It will change to the night theme at 6PM.

01:23 PM Change theme now:

About me

I was born on July 29th 1982 in Amersfoort, the Netherlands and currently residing in that very same place. I'm a graphic designer/webdeveloper that aims to create vibrant and detailed designs while taking account of usability aspects and webstandards.

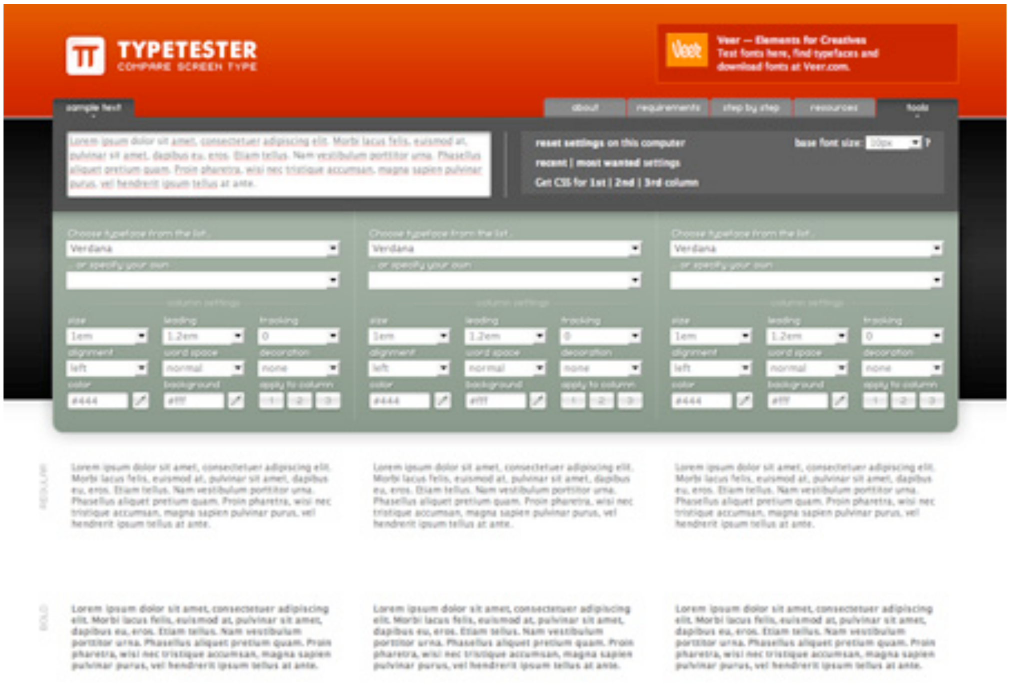
For the past couple of years I've been doing freelance work as a designer and XHTML/CSS coder. Since February '07 I'm employed at MediaMonks, an allround multimedia company located in Hilversum, and working on all kinds of projects varying from websites, banners, print and newsletters.

Contact

I'm available for design jobs if the offer is

Typetester

This Web site allows you to compare commonly available Web site fonts.


TYPETESTER
COMPARE SCREEN TYPE
Veer — Elements for Creatives
Test fonts here, find typefaces and download fonts at Veer.com.
sample text
about
requirements
step by step
resources
tools

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Morbi lacus felis, euismod at, pulvinar sit amet, dapibus eu, eros. Etiam tellus. Nam vestibulum porttitor urna. Phasellus aliquet pretium quam. Proin pharetra, wisi nec tristique accumsan, magna sapien pulvinar purus, vel hendrerit ipsum tellus at ante.

reset settings on this computer
recent | most wanted settings
Get CSS for 1st | 2nd | 3rd column

base font size: 10px ?

Choose typeface from the list: Verdana
...or specify your own

column settings

size: 1em
leading: 1.2em
tracking: 0
alignment: left
word space: normal
decoration: none
color: #444
background: #fff
apply to column: 1 2 3

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Morbi lacus felis, euismod at, pulvinar sit amet, dapibus eu, eros. Etiam tellus. Nam vestibulum porttitor urna. Phasellus aliquet pretium quam. Proin pharetra, wisi nec tristique accumsan, magna sapien pulvinar purus, vel hendrerit ipsum tellus at ante.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Morbi lacus felis, euismod at, pulvinar sit amet, dapibus eu, eros. Etiam tellus. Nam vestibulum porttitor urna. Phasellus aliquet pretium quam. Proin pharetra, wisi nec tristique accumsan, magna sapien pulvinar purus, vel hendrerit ipsum tellus at ante.

Conclusion

Both brand elements and creative design elements should enhance the user experience, and not prevent it. **Good web typography improves user experience**. It improves communication, flow, and interactivity. Consider how your brand, typography, and design elements combine to form an interface for your users to move through.

Lessons From Swiss Style Graphic Design

Diogo Terror

Also known as International Style, the Swiss Style does not simply describe a style of graphic design made in Switzerland. It became famous through the art of very talented Swiss graphic designers, but it emerged in Russia, Germany and Netherlands in the 1920's. This style in art, architecture and culture became an ‘international’ style after the 1950's and it was produced by artists all around the globe. Despite that, people still refer to it as the Swiss Style or the Swiss Legacy.

This progressive, radical movement in graphic design is not concerned with the graphic design in Switzerland, but rather with the new style that had been proposed, attacked and defended in the 1920s in Switzerland.

Rrrroooaaarrrrr!
12
13

Keen attention to detail, precision, craft skills, systems of education and technical training and a high standard of print, as well as a clear refined and inventive lettering and typography laid out a foundation for a new movement that has been exported worldwide in 1960s to become an international style.

Emerging from the modernist and constructivist ideals, the Swiss Style can be defined as an authentic pursuit for simplicity – the beauty is secondary to the purpose, not a purpose in itself. The principle "form follows function" became a battle-cry of Modernist architects after the 1930s.

As a consequence of this principle, most of the Swiss Style craft is devoted to the minimal elements of style such as typography and content layout rather than on textures and illustrations.

> *"Perfection is achieved, not when there is nothing left to add, but when there is nothing left to remove." Antoine de Saint-Exupéry*

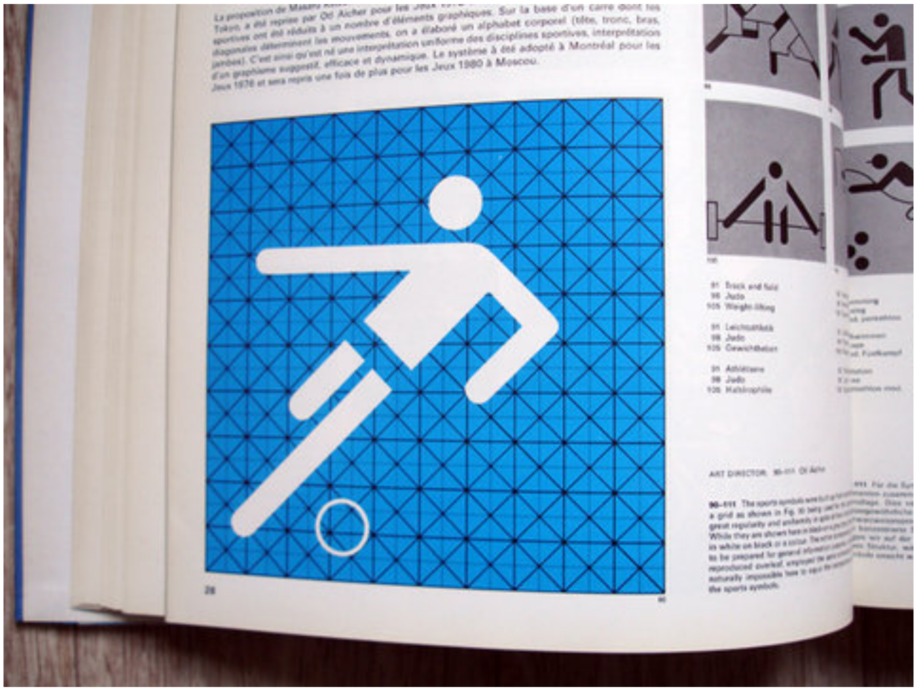
How the Swiss Style Relates to the web

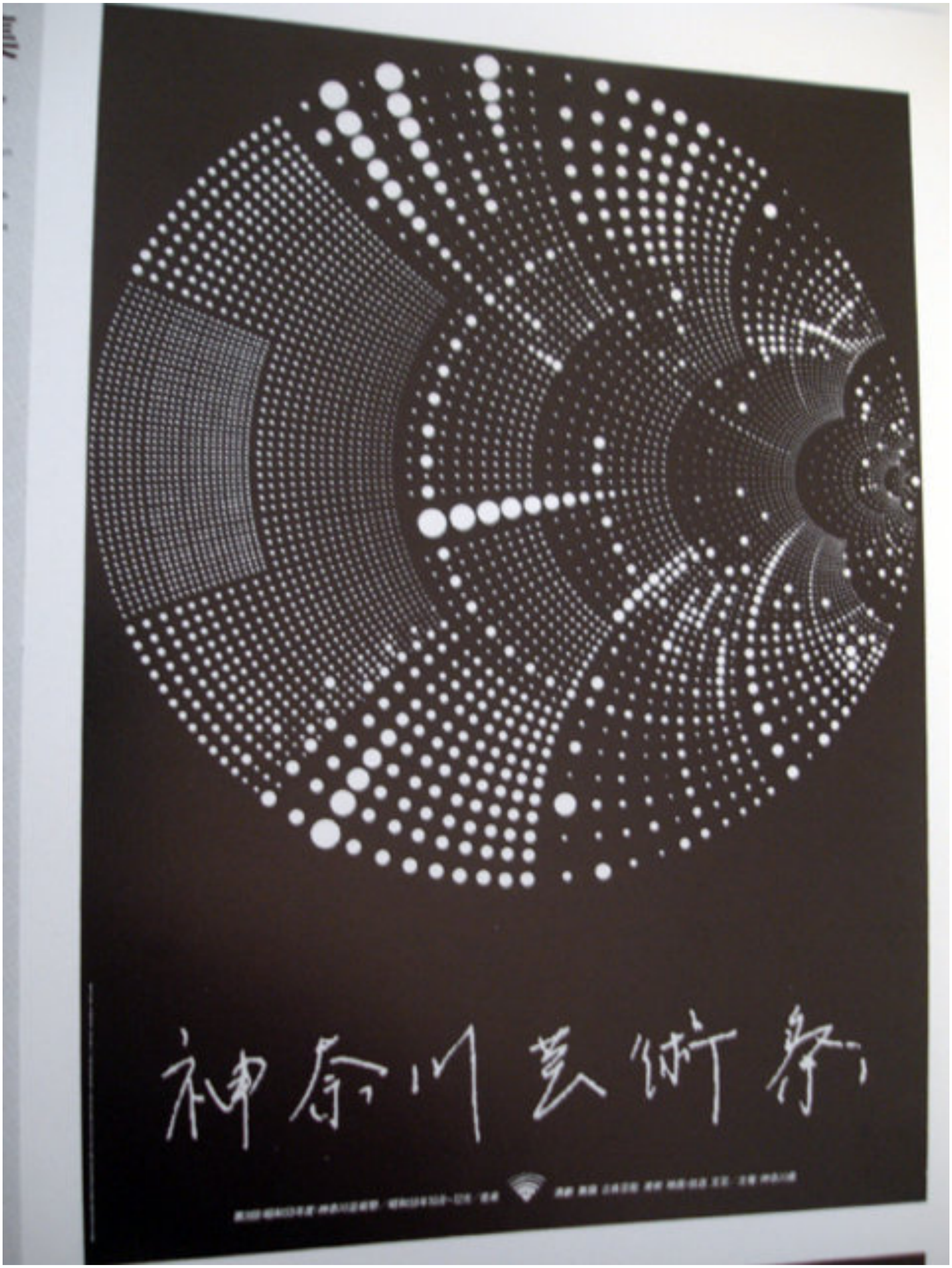
This style of graphic design was born in the institutional context. The majority of pieces from this movement are in the form of posters, stamps, institutional typographical identity, street signs, etc. In this sense, these artists are leveraging much more than just top-down communication, they’re creating user-friendly interfaces.

As a result of that, Swiss Style artists tend to put their artistic efforts in that the content they are conveying delivers its intended message in a clear, unobtrusive fashion. One can make the point that they were thinking, in a broader sense, about usability long before the web even existed. How can we not learn from these great masters?

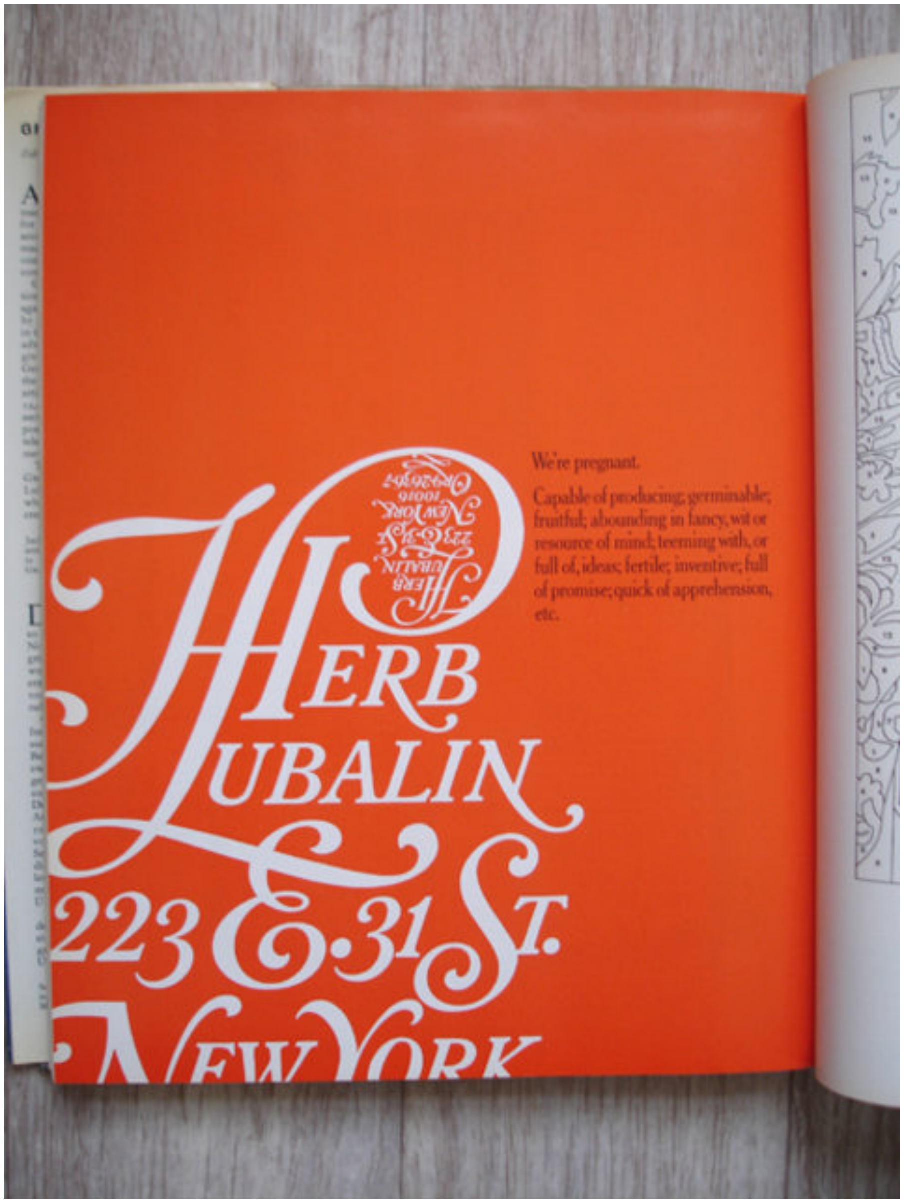
Uniformity and geometry

Even a quick study of classic Swiss style works reveals a strong attention of graphic designers to uniform design elements and strong geometric shapes. Graphic artists have experimented with abstract geometric patterns, uncommon color combinations, text manipulations and striking abstract visuals that were used to clearly convey their purpose in a very remarkable way.




神奈川芸術祭

Whitespace: Let the text breath


We're pregnant.
Capable of producing; germinable; fruitful; abounding in fancy, wit or resource of mind; teeming with, or full of, ideas; fertile; inventive; full of promise; quick of apprehension, etc.
Herb Lubalin 223 E. 31 St. New York 10016 Or9-2967
Herb Lubalin
223 E. 31 St.
New York

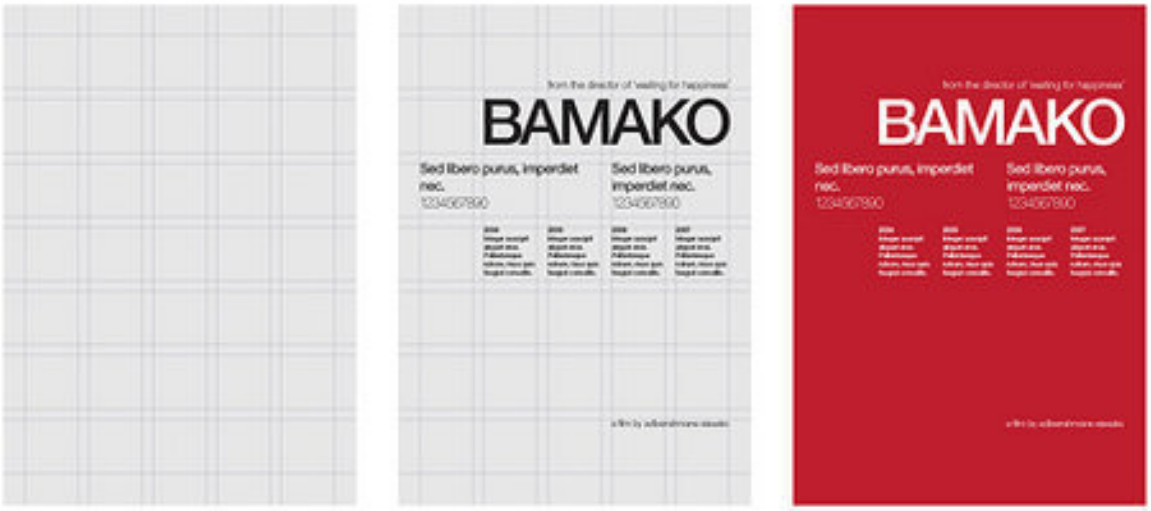
Whitespace can never be underrated. It's a very important element for both visual impact and readability. It feels quite inviting when a web page is laid out in such a fashion that the organization of the page (and the site) is clearly conveyed in a split second.

It's also good for business, since people use interfaces that they understand and tend to reject the ones they don't.

A common way that people pursue organization is by having markers that separate the different parts of the site: in web design icons and illustrations are used to separate various types of content. But Swiss style is all about using less, so instead of adding more elements to work with, they prefer to remove as much as possible. This is a great example of the ‚less is more' principle and of the 'the content is the interface' wisdom.

Grid systems

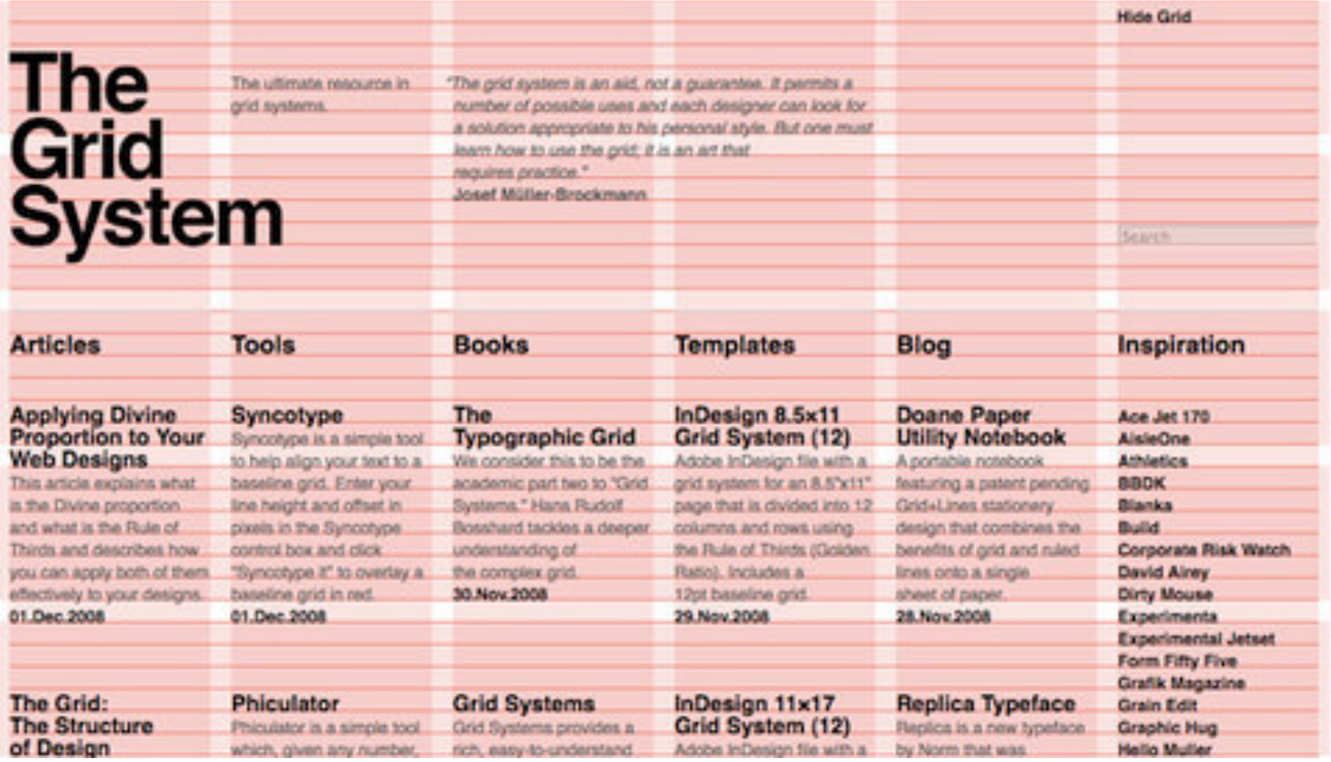
A grid system is a rigid framework that is supposed to help graphic designers in the meaningful, logical and consistent organization of information on a page. Rudimentary versions of grid systems existed since the medieval times, but a group of graphic designers, mostly inspired in ideas from typographical literature started building a more rigid and coherent system for page layout. The core of these ideas were first presented in the book Grid Systems in Graphic Design by Josef Müller-Brockmann which helped to spread the knowledge about the grids thorough the world.


BAMAKO
Sed libero purus, imperdiet nec.
Sed libero purus, imperdiet nec.
1234567890
1234567890
BAMAKO
Sed libero purus, imperdiet nec.
Sed libero purus, imperdiet nec.
1234567890
1234567890

Nowadays grid systems are an established tool that is often used by print and web designers to create well-structured, balanced designs.

More than grids, structured information

When we learn from the Swiss Style literature, it’s very easy to embrace the grid system as a purely visual framework. However, upon a further examination we can see that grids are more than just the art of placing elements; there’s a subtle layer of semantic organization of data which, despite not being inherent to the use of the grid, is a big part of the Swiss Style’s essence.



The Grid System

The ultimate resource in grid systems.

"The grid system is an aid, not a guarantee. It permits a number of possible uses and each designer can look for a solution appropriate to his personal style. But one must learn how to use the grid; it is an art that requires practice."
Josef Müller-Brockmann

Articles

Applying Divine Proportion to Your Web Designs
This article explains what is the Divine proportion and what is the Rule of Thirds and describes how you can apply both of them effectively to your designs.
01.Dec.2008

The Grid: The Structure of Design

Tools

Syncotype
Syncotype is a simple tool to help align your text to a baseline grid. Enter your line height and offset in pixels in the Syncotype control box and click "Syncotype it" to overlay a baseline grid in red.
01.Dec.2008

Phiculator
Phiculator is a simple tool which, given any number,

Books

The Typographic Grid
We consider this to be the academic part two to "Grid Systems." Hans Rudolf Bosshard tackles a deeper understanding of the complex grid.
30.Nov.2008

Grid Systems
Grid Systems provides a rich, easy-to-understand

Templates

InDesign 8.5x11 Grid System (12)
Adobe InDesign file with a grid system for an 8.5"x11" page that is divided into 12 columns and rows using the Rule of Thirds (Golden Ratio). Includes a 12pt baseline grid.
29.Nov.2008

InDesign 11x17 Grid System (12)
Adobe InDesign file with a

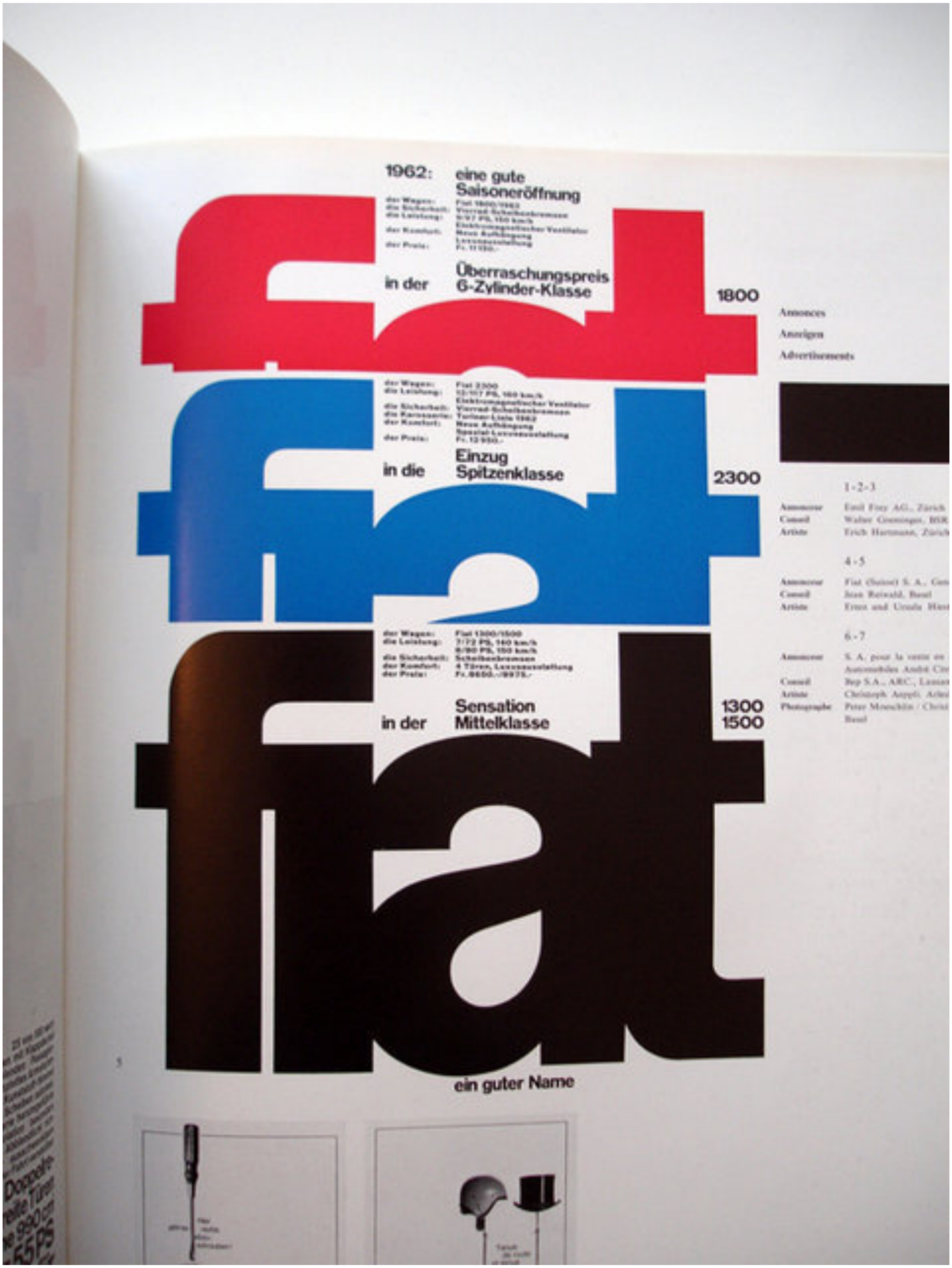
Blog

Doane Paper Utility Notebook
A portable notebook featuring a patent pending Grid+Lines stationery design that combines the benefits of grid and ruled lines onto a single sheet of paper.
28.Nov.2008

Replica Typeface
Replica is a new typeface by Norm that was

Inspiration

Ace Jet 170
AisleOne
Athletics
BBDK
Blanka
Build
Corporate Risk Watch
David Airey
Dirty Mouse
Experimenta
Experimental Jetset
Form Fifty Five
Grafik Magazine
Grain Edit
Graphic Hug
Hello Muller


1962:
eine gute Saisoneröffnung
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Advertisements
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Einzug Spitzenklasse
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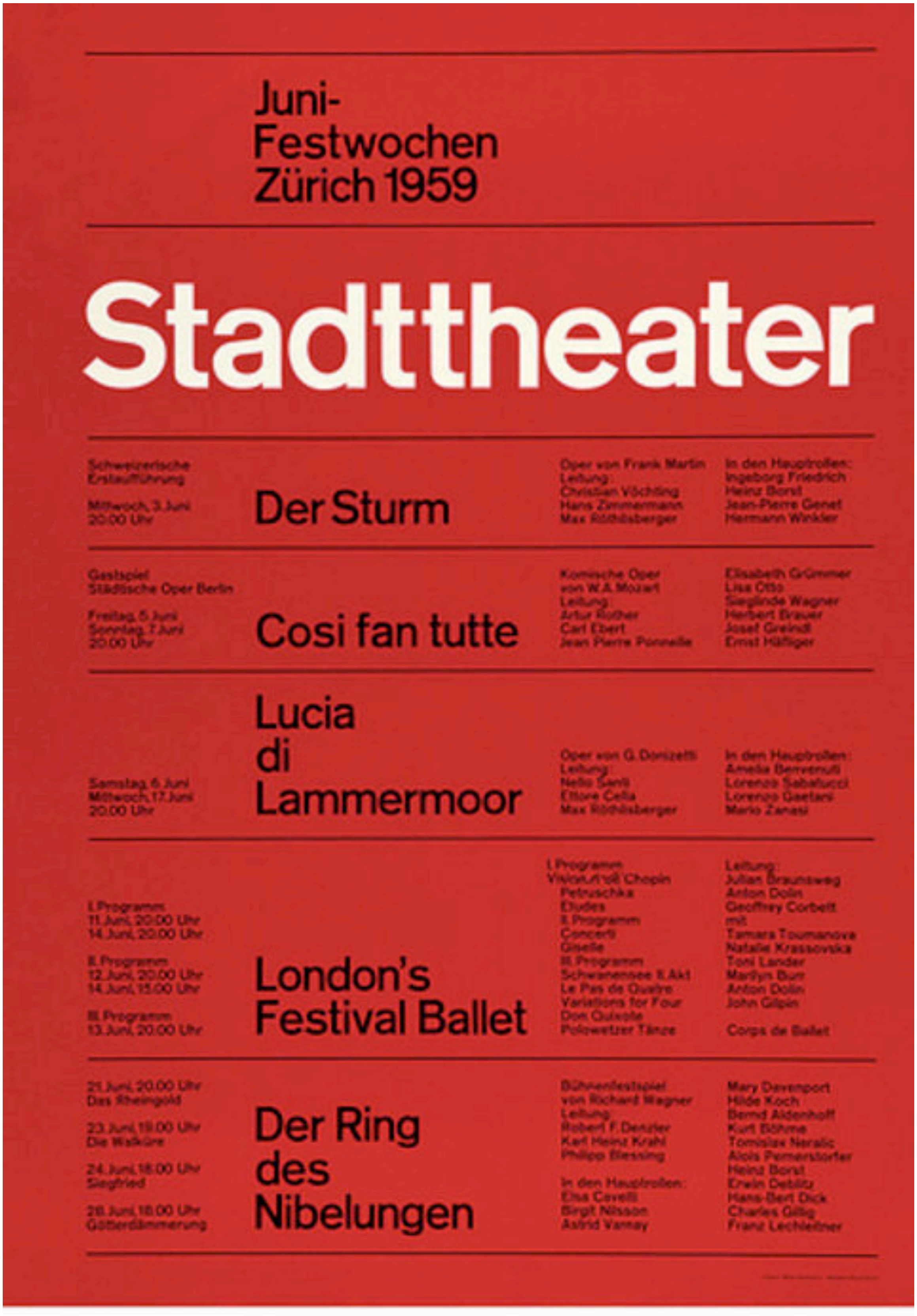
4-5
6-7
5



Juni-
Festwochen
Zürich 1959

Stadttheater

Schweizerische
Erstaufführung

Mittwoch, 3. Juni
20.00 Uhr

Der Sturm

Oper von Frank Martin
Leitung:
Christian Vöchting
Hans Zimmermann
Max Röthlisberger

In den Hauptrollen:
Ingeborg Friedrich
Heinz Borst
Jean-Pierre Genet
Hermann Winkler

Gastspiel
Städtische Oper Berlin

Freitag, 5. Juni
Sonntag, 7. Juni
20.00 Uhr

Cosi fan tutte

Komische Oper
von W. A. Mozart
Leitung:
Artur Rother
Carl Ebert
Jean Pierre Ponnelle

Elisabeth Grümmer
Lisa Otto
Sieglinde Wagner
Herbert Brauer
Josef Greindl
Ernst Häfliger

Samstag, 6. Juni
Mittwoch, 17. Juni
20.00 Uhr

Lucia
di
Lammermoor

Oper von G. Donizetti
Leitung:
Nello Santi
Ettore Cella
Max Röthlisberger

In den Hauptrollen:
Amelia Benvenuti
Lorenzo Sabatucci
Lorenzo Gaetani
Mario Zanasi

I. Programm
11. Juni, 20.00 Uhr
14. Juni, 20.00 Uhr

II. Programm
12. Juni, 20.00 Uhr
14. Juni, 15.00 Uhr

III. Programm
13. Juni, 20.00 Uhr

London's
Festival Ballet

I. Programm
Vision of Chopin
Petruschka
Etudes
II. Programm
Concerti
Giselle
III. Programm
Schwanensee II. Akt
Le Pas de Quatre
Variations for Four
Don Quixote
Polowetzer Tänze

Leitung:
Julian Braunsweg
Anton Dolin
Geoffrey Corbett
mit
Tamara Toumanova
Natalie Krassovska
Toni Lander
Marilyn Burr
Anton Dolin
John Gilpin

Corps de Ballet

21. Juni, 20.00 Uhr
Das Rheingold

23. Juni, 19.00 Uhr
Die Walküre

24. Juni, 18.00 Uhr
Siegfried

28. Juni, 18.00 Uhr
Götterdämmerung

Der Ring
des
Nibelungen

Bühnenfestspiel
von Richard Wagner
Leitung:
Robert F. Denzler
Karl Heinz Krahl
Philipp Blessing

In den Hauptrollen:
Elsa Cavelti
Birgit Nilsson
Astrid Varnay

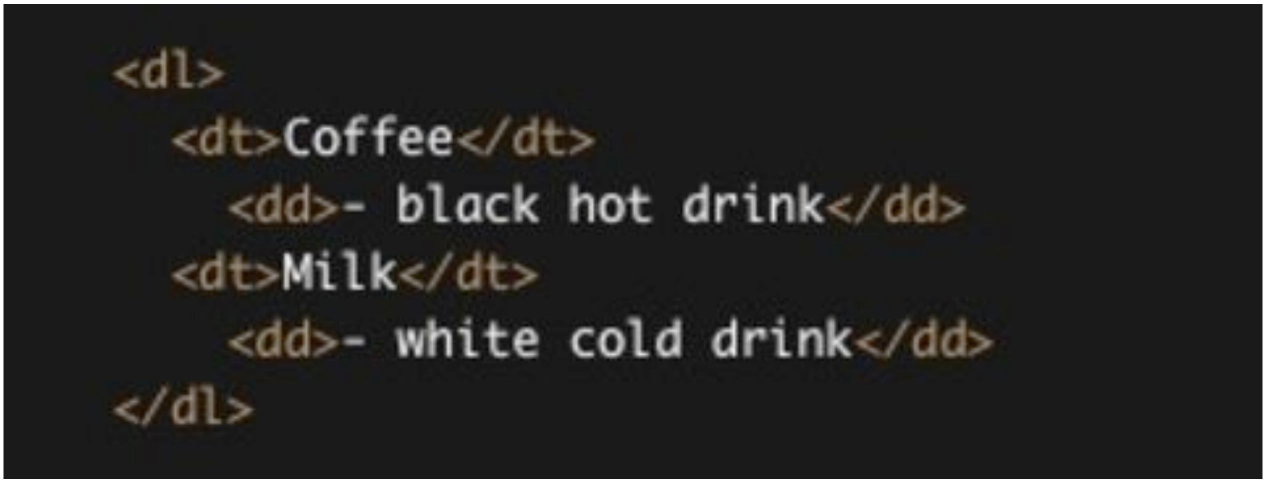
Mary Davenport
Hilde Koch
Bernd Aldenhoff
Kurt Böhme
Tomislav Neralic
Alois Pernerstorfer
Heinz Borst
Erwin Deblitz
Hans-Bert Dick
Charles Gillig
Franz Lechleitner

These posters have a very well-defined structure. It definitely feels like tabular data, and tabular data is one such case that the disposition of the information extrapolates the realm of graphic layout and starts hinting on the meaning of data and how various chunks of data relate to each other.

The abuse of tables as structural elements was, and still is, very harmful to web accessibility. However, blindly replacing tables for div tags does not help to make code more semantic. List elements are a great solution for collections of similar data, but ULs and OLs do not define any kind of relation between this data.

Enter Definition Lists

Definition List (DL) is probably one of the most underestimated HTML elements. It's a list element such as UL and OL, but it is supposed to present a collection of terms (DT) and descriptions (DD). Its most obvious use case is to represent dictionaries, but its potential goes way beyond that. The W3C Recommendation gives the example of a dialogue where DTs are character names and DDs are the text lines. It could also be used to represent calendars (days and assignments), articles summaries (titles and descriptions) and much more.



```
<dl>
  <dt>Coffee</dt>
    <dd>- black hot drink</dd>
  <dt>Milk</dt>
    <dd>- white cold drink</dd>
</dl>
```

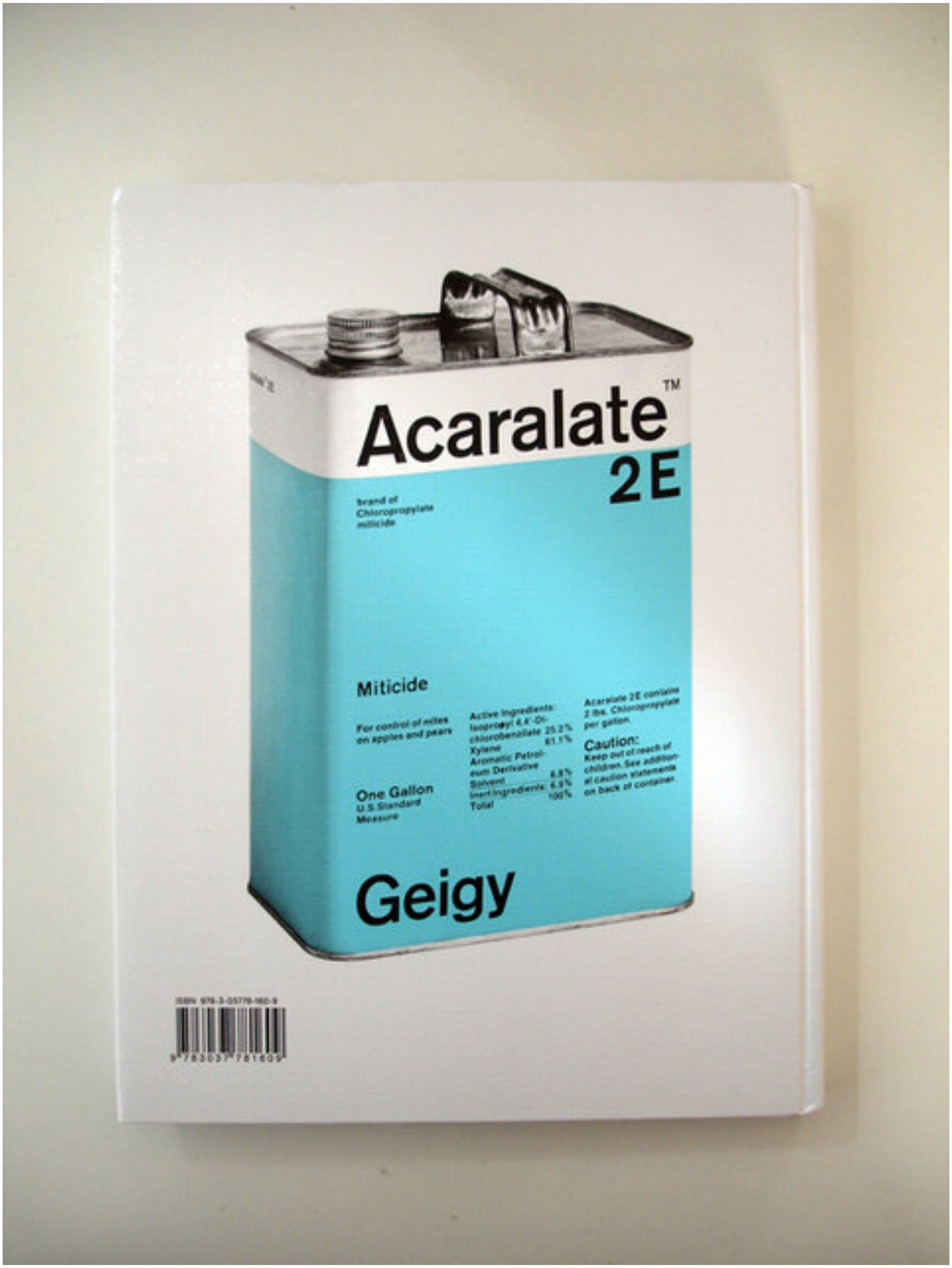
Elementary

There is also a direct influence from the constructivism, elementarism and minimalism movements in the Swiss Style artists. Minimal design is about removing the unnecessary and emphasizing the necessary; it’s about a functional and simple use of fundamental elements of style for the purpose of the artist’s objectives.

Volksversammlung
22. Oktober 1933
nein

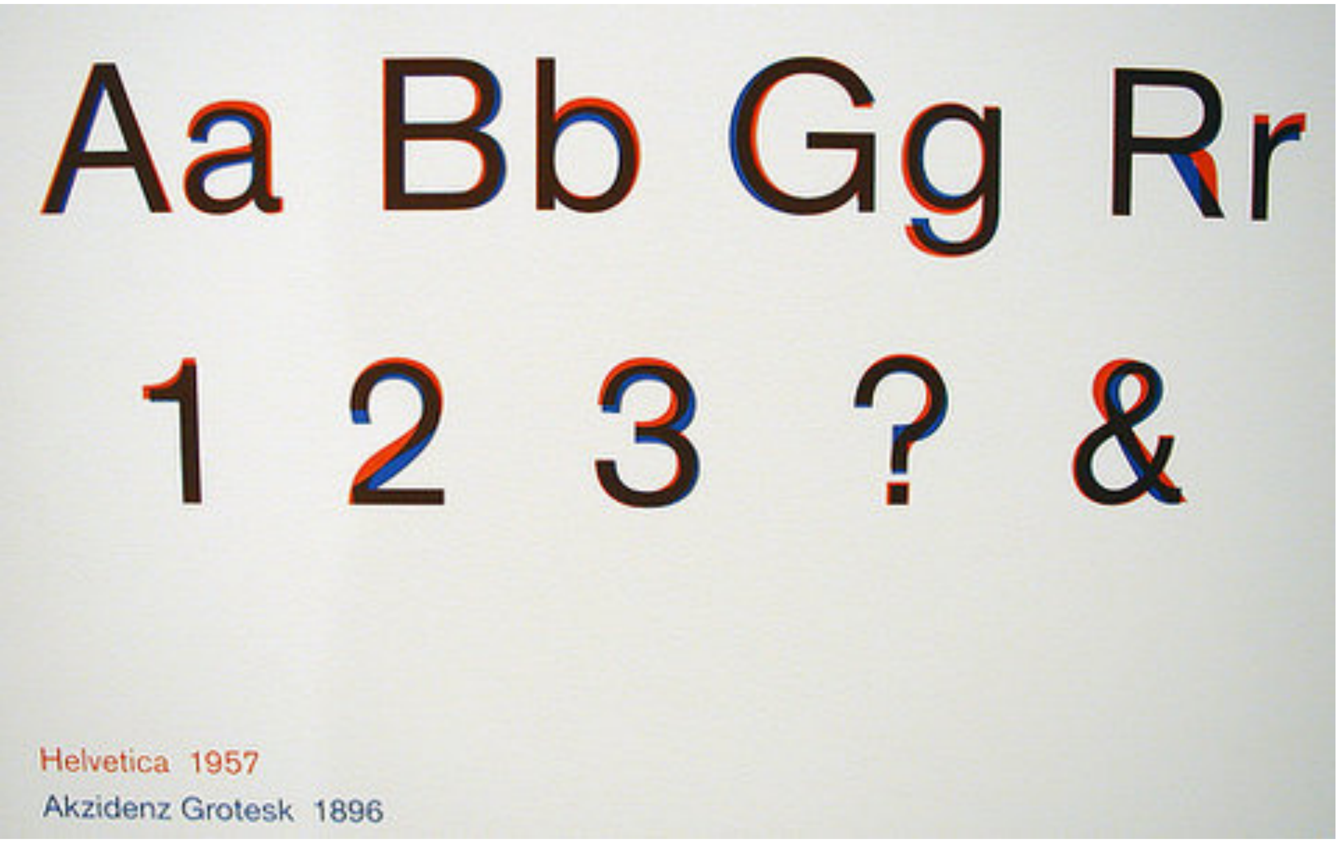
This principle is one of the core reasons why Swiss Style graphic designers pay so much attention to type. Typeface is one of the most fundamental elements of visual communication that is able to deliver the message in a very precise, clear way.

According to the Swiss movement, **adding more elements without fully exploring the potential of the fundamental ones** can be considered a ‘waste’. As these basic elements, like typography, have so much aesthetic potential, there’s rarely a need for other visual graphics elements.


Acaralate™
2E
brand of
Chloropropylate
miticide
Miticide
For control of mites
on apples and pears
Active Ingredients:
Isopropyl 4,4'-Di-
chlorobenzilate 25.2%
Xylene 61.1%
Aromatic Petrol-
eum Derivative
Solvent 6.8%
Inert Ingredients 6.9%
Total 100%
Acaralate 2E contains
2 lbs. Chloropropylate
per gallon.
Caution:
Keep out of reach of
children. See addition-
al caution statements
on back of container.
One Gallon
U.S.Standard
Measure
Geigy

In many aspects, these ideas touch on the core proposals of the De Stijl movement. The neoplasticism, as proposed by De Stijl artists, is about elementarism and geometry not only as a form of exploring the potential of the fundamental elements, but as a pursuit of beauty and harmony, hinting on a more mystical belief in 'ideal' geometric forms.

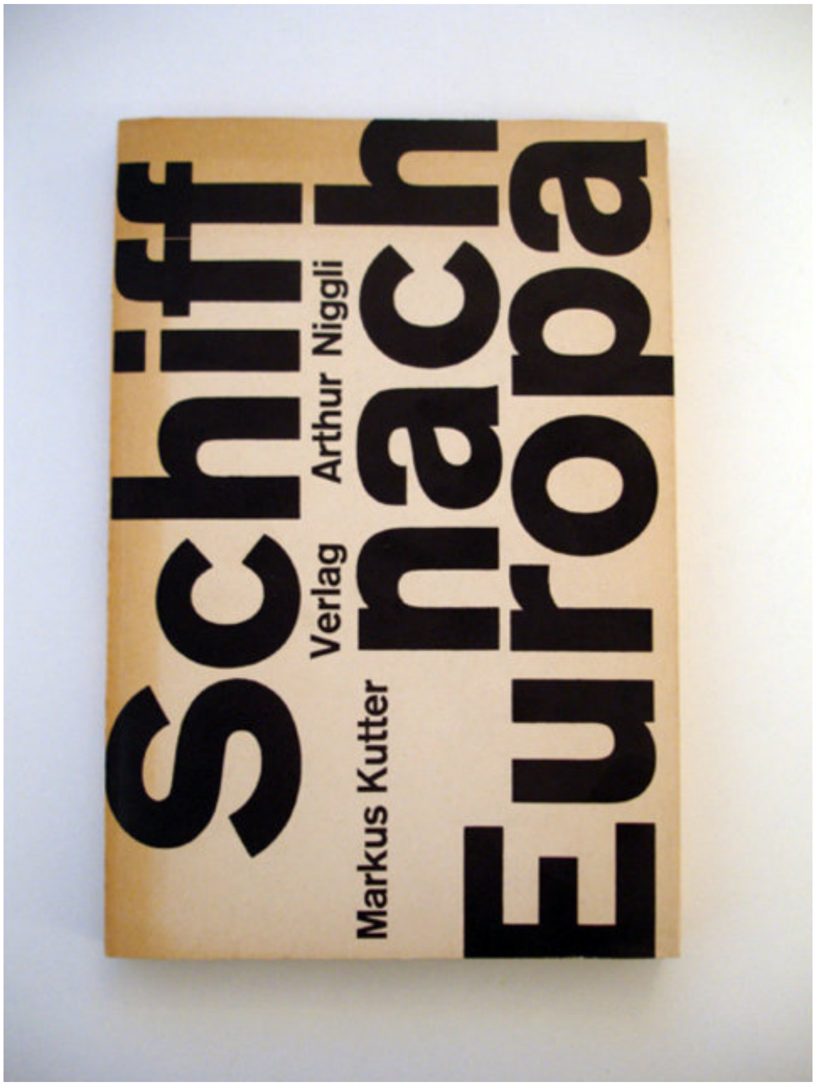
Drop the Serif (...or rather don't)

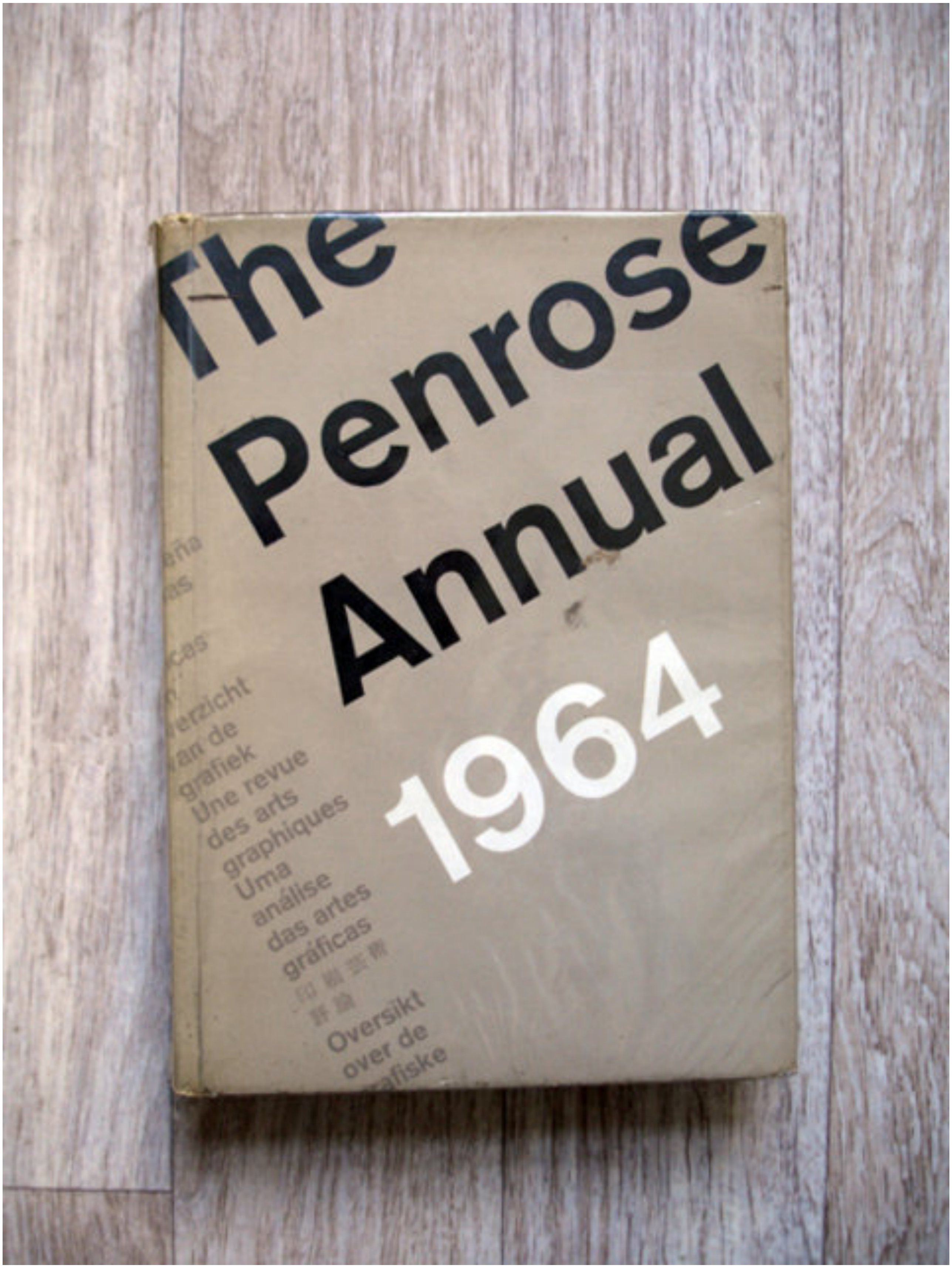


One of the strongest characteristics of the Swiss style typography is the use of sans-serif typefaces such as Akzidenz Grotesk and Neue Haas Grotesk (a.k.a Helvetica).

In fact, when Jan Tschichold wrote „Die neue Typographie“, he ignored any use of non sans-serif typefaces. With this philosophy, graphic designers were aiming at clarity, simplicity and universality. Helvetica, for instance, is a typeface that is famous for its pervasiveness: it is used in corporate identity, street signs, magazines and pretty much everywhere else. The Swiss Style advocates that the typeface does not have to be expressive in itself, it must be an unobtrusive instrument of expression.

> *"I don't think that type should be expressive at all. I can write the word 'dog' with any typeface and it doesn't have to look like a dog. But there are people that [think that] when they write 'dog' it should bark."*
>
> ***Massimo Vignelli*** *in the documentary Helvetica.*




The
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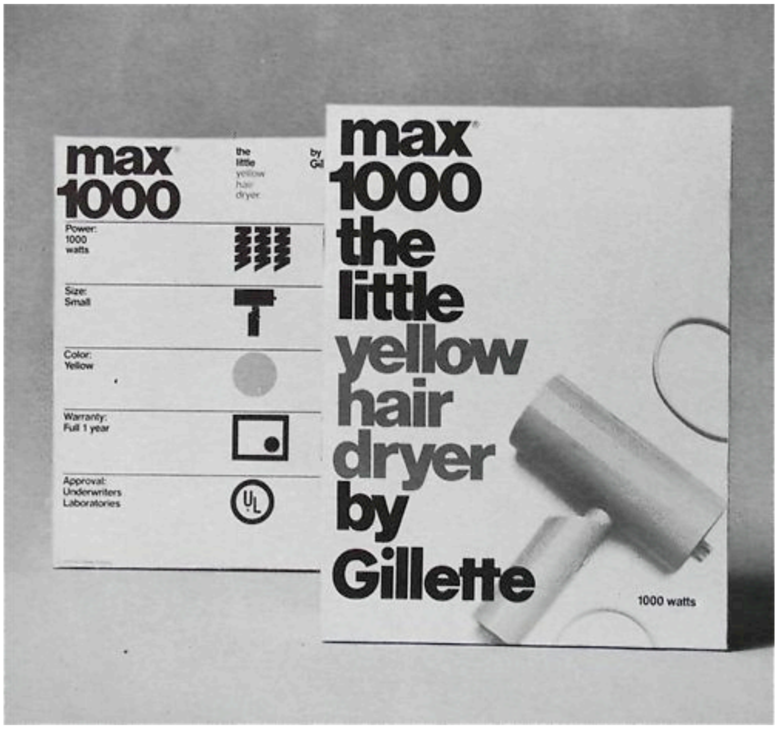
gráficas
印刷藝術
評論
Oversikt
over de
afiske

This is by no means a rigid rule. When Swiss Style graphic designers advocate the use of sans-serif typefaces, they weren't paying attention to the historical legacy and experimented with something new. Even Jan Tschichold himself admitted that his book was too rigid. If there's one single lesson from the Swiss Style it is to love and respect typefaces.

Font-size as a tool for readability, impact and rythm

It's very common to spot the use of font-size contrast in the works of the Swiss Style.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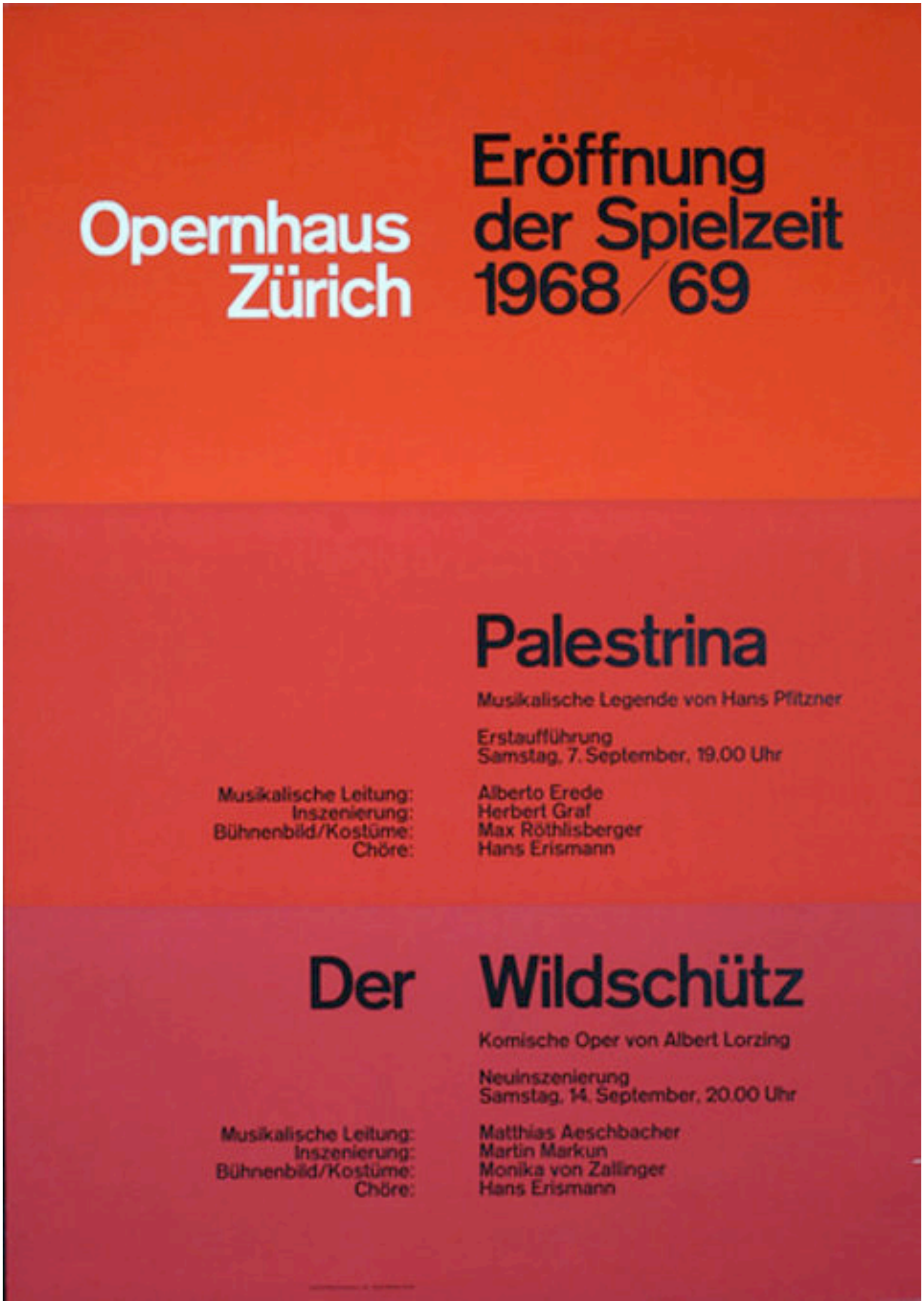
the little yellow hair dryer
by Gil
Power: 1000 watts
Size: Small
Color: Yellow
Warranty: Full 1 year
Approval: Underwriters Laboratories
UL
max 1000 the little yellow hair dryer by Gillette
1000 watts

Different font-sizes not only generate visual impact, but also provide readers with a hint about the hierarchy of the presented data. Huge words are the entry points, the top-level elements in the content's information architecture and page's hierarchy. This is a very efficient way of guiding the reader's eyes through the page, thus working as an interface to the content.



Opernhaus Zürich

Eröffnung der Spielzeit 1968/69

Palestrina

Musikalische Legende von Hans Pfitzner

Erstaufführung
Samstag, 7. September, 19.00 Uhr

Musikalische Leitung:	Alberto Erede
Inszenierung:	Herbert Graf
Bühnenbild/Kostüme:	Max Röthlisberger
Chöre:	Hans Erismann

Der Wildschütz

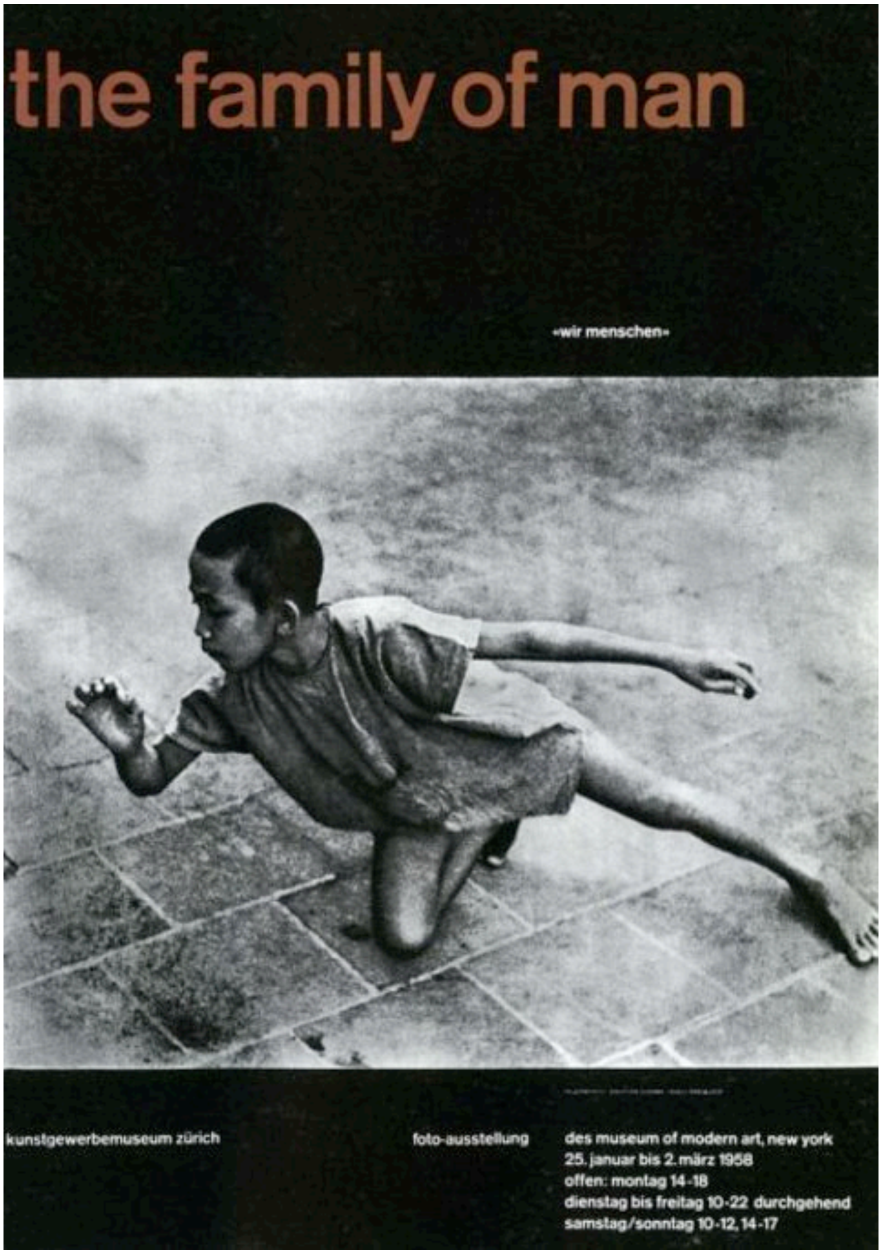
Komische Oper von Albert Lorzing

Neuinszenierung
Samstag, 14. September, 20.00 Uhr

Musikalische Leitung:	Matthias Aeschbacher
Inszenierung:	Martin Markun
Bühnenbild/Kostüme:	Monika von Zallinger
Chöre:	Hans Erismann

Photography - yes, photography!

Despite not being particularly famous for it, one important part of the Swiss Style is its remarkable use of photography. Following the modernist ideas in which photography was a much better tool to portray reality than drawings and illustrations, the **Neue Grafik Magazin**, a very important Swiss graphic design publication at the time, dedicated a big part of its content to photography and its application in design.


the family of man
«wir menschen»
kunstgewerbemuseum zürich
foto-ausstellung
des museum of modern art, new york
25. januar bis 2. märz 1958
offen: montag 14-18
dienstag bis freitag 10-22 durchgehend
samstag/sonntag 10-12, 14-17

8 Simple Ways to Improve Typography in Your Designs

Antonio Carusone

Many people, designers included, think that **typography** consists of only selecting a typeface, choosing a font size and whether it should be regular or bold. For most people it ends there. But there is much more to achieving good typography and it's in the details that designers often neglect.

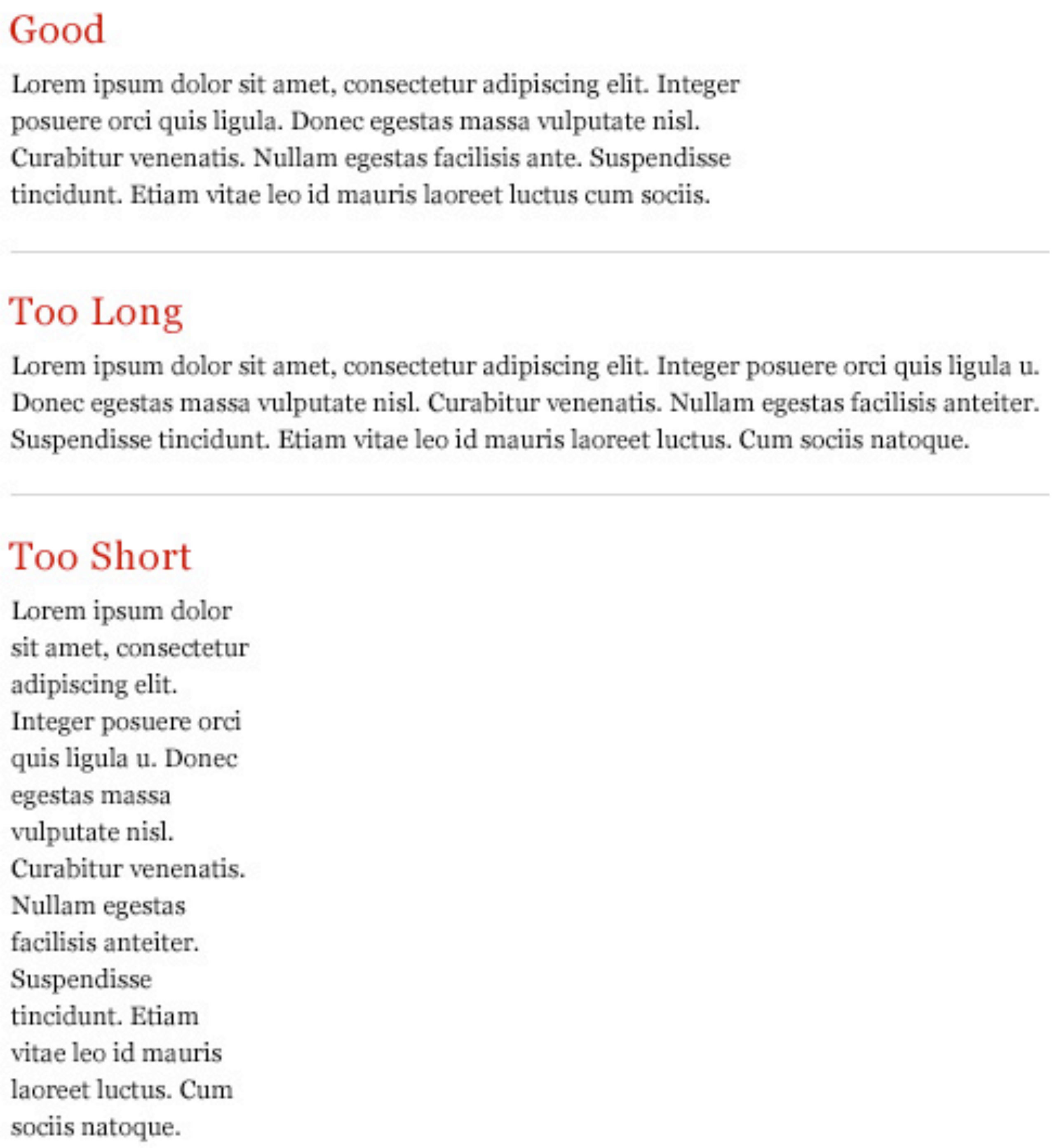
These details give the designer total control, allowing them to create beautiful and consistent typography in their designs. While these details can be applied across different types of media, in this articles we're going to focus on how to apply them to web design using CSS.

Here are 8 simple ways you can **use CSS to improve your typography** and hence the overall usability of your designs.

1. Measure

The measure is the length of a line of type. To a reader's eye, long or short lines can be tiring and distracting. A long measure disrupts the rhythm because the reader has a hard time locating the next line of type.

The only time a narrow measure is acceptable is with a small amount of text. For optimum readability you want the measure to be between 40 to 80 characters, including spaces. For a **single-column design 65 characters** is considered ideal.



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Too Short

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A simple way to calculate the measure is to use Robert Bringhurst's method which multiples the type size by 30. So if the type size is 10px, multiplying it by 30 gives you a measure of 300px or around 65 characters per line. The code would look something like this:

```
p {
  font-size: 10px;
  max-width: 300px;
}
```

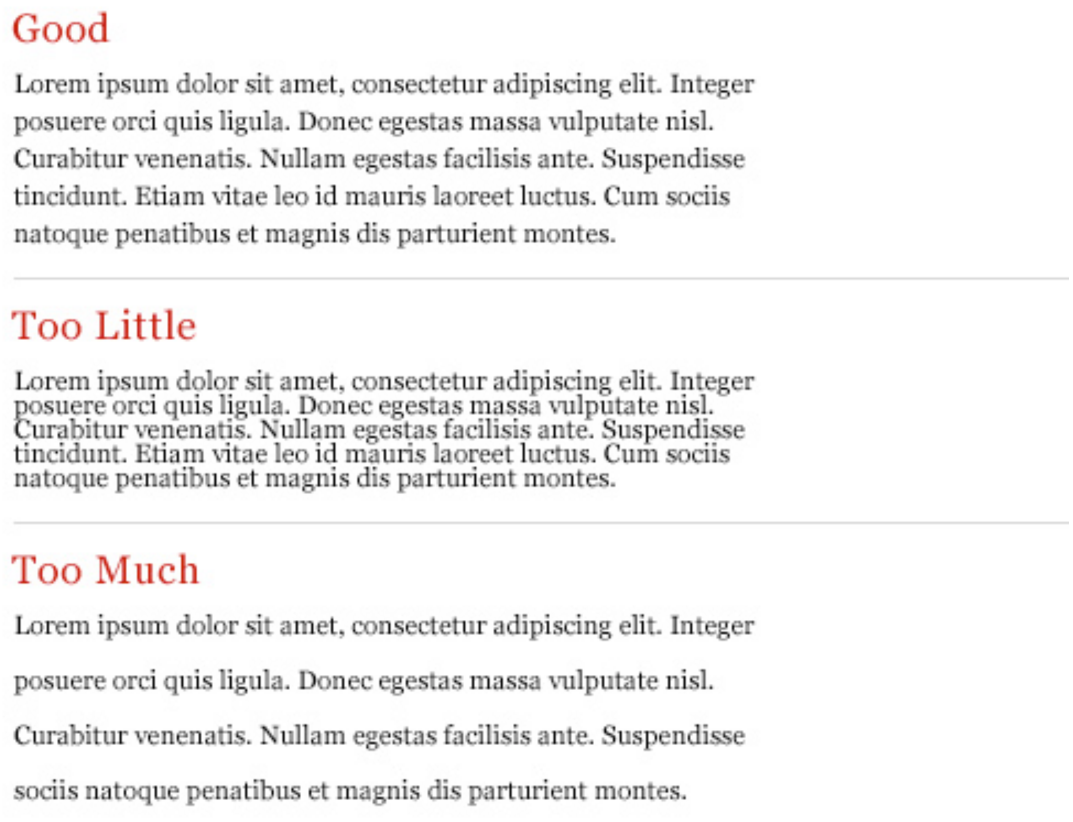
I'm using px because it makes the math easier but this also works with ***em****.*

2. Leading

Leading is the space between the lines of type in a body of copy that plays a big role in readability. Correctly spaced lines make it easier for a reader to follow the type and improves the overall appearance of the text. Leading also alters typographic color, which is the density or tone of a composition.

Many factors affect leading: typeface, type size, weight, case, measure, word spacing, etc. The longer the measure, the more leading is needed. Also, the larger the type size, the less leading is required.

A **good rule** is to set the leading **2 to 5pt larger than the type size**, depending on the typeface. So if you set the type at 12pt, a 15pt or 16pt leading should work well on the web.



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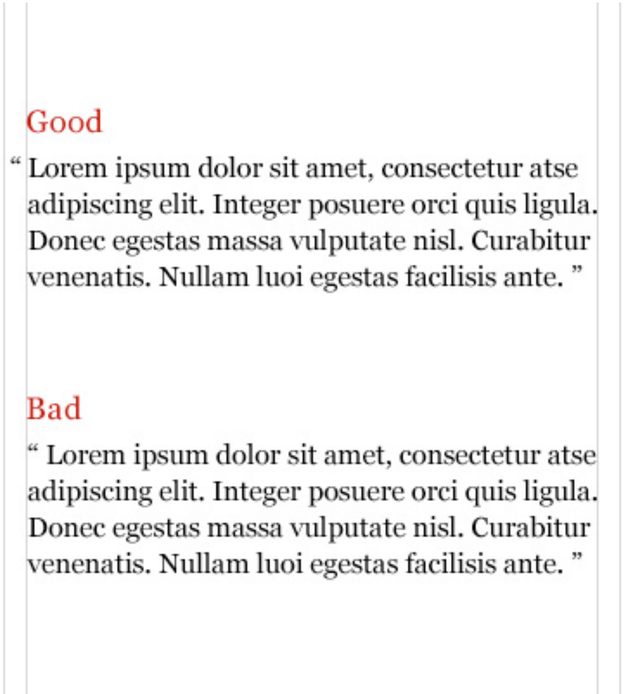
This takes some finessing to get the right spacing but here is an example of what the code would look like:

```
body {
  font-family: Helvetica, sans-serif;
  font-size: 12px;
  line-height: 16px;
}
```

3. Hanging Quotes

Hang quotes in the margin of the body of text. By not doing so a quotation mark that is flush with the text will interrupt the left margin and disrupt the rhythm of the reader. The use of hanging quotes keeps the left alignment intact and balanced therefore increasing readability. This is achieved very easily with CSS using the `blockquote` element:

```css
blockquote {
  text-indent: -0.8em;
  font-size: 12px;
}
```



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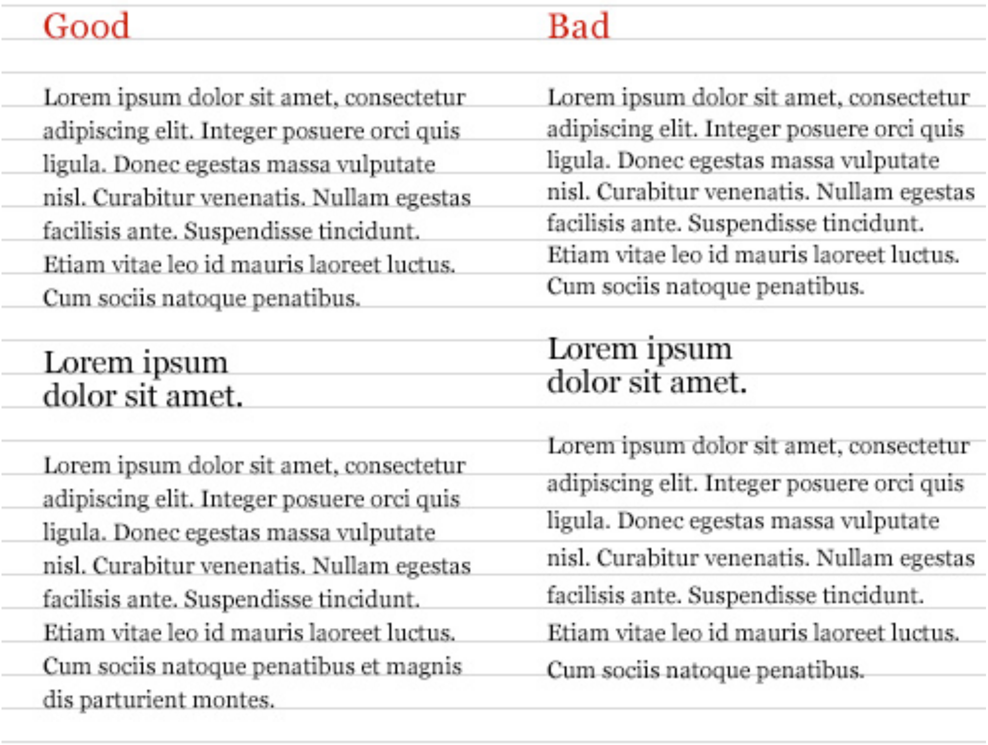
The negative indent will vary depending on the typeface, type size and margins.

4. Vertical Rhythm

A baseline grid is the foundation for consistent typographic rhythm on a page. It allows the readers to easily follow the flow of the text, which in turn increases readability. A **continuous rhythm in the vertical space** keeps all the text on a consistent grid so that proportion and balance are retained throughout the page, no matter the type size, leading or measure.



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To keep a vertical rhythm in CSS, you want the spacing between elements and the line-spacing (leading) to equal the size of the **baseline grid**. For example, lets say you’re using a 15px baseline grid, meaning that there are 15px between each baseline.

The line-spacing would be 15px and the space between each paragraph would also be 15px. Here is an example

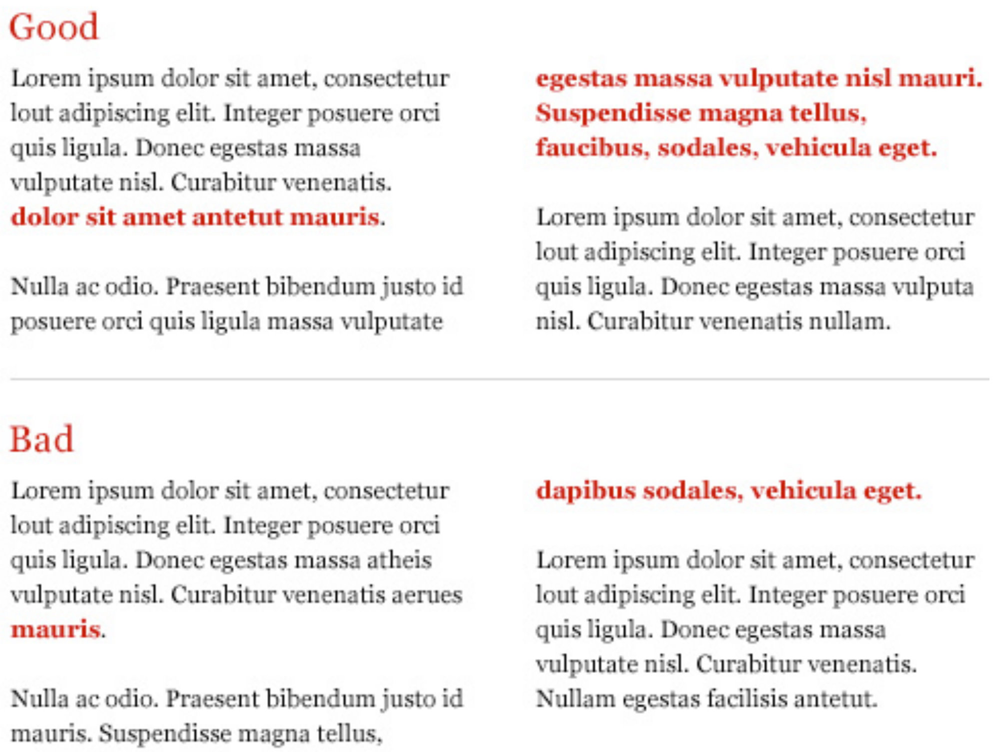
```
body {
  font-family: Helvetica, sans-serif;
  font-size: 12px;
  line-height: 15px;
}

p {
  margin-bottom: 15px;
}
```

This allows each paragraph element to align with the grid, keeping the vertical rhythm of the text.

5. Widows and Orphans

A **widow** is a short line or single word at the end of a paragraph. An orphan is a word or short line at the beginning or end of a column that is separated from the rest of the paragraph. Widows and Orphans create awkward rags, interrupt the reader's eye and affect readability. They can be avoided by adjusting the type size, leading, measure, wordspacing, letterspacing or by entering manual line breaks.



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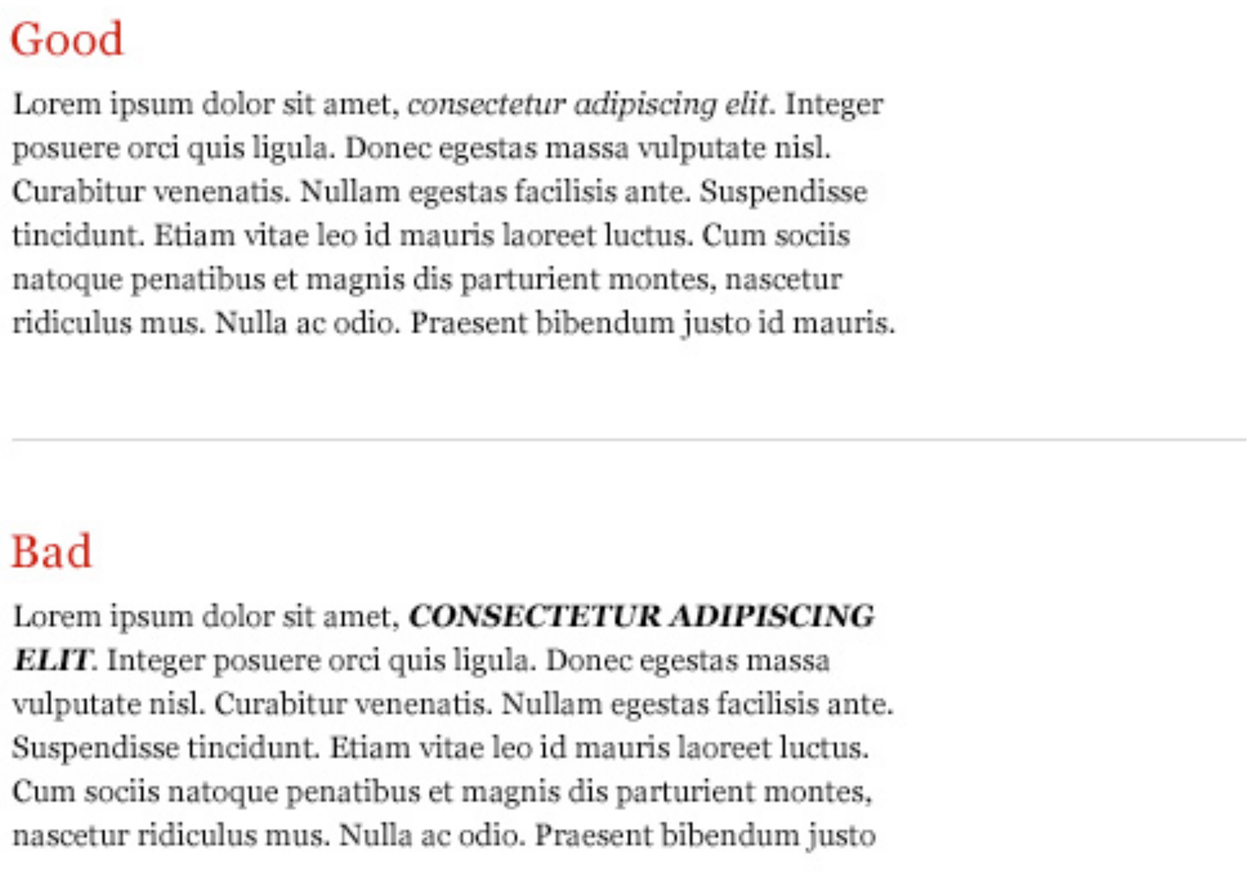
Unfortunately, there is no easy way to prevent typographic widows and orphans with CSS. One way to remove them has been mentioned above, but there is also a jQuery plug-in called jQWidon’t that places a non-breaking space between the last two words of an element.

6. Emphasis

Giving emphasis to a word **without interrupting the reader** is important. Using italics is widely considered to be the ideal form of emphasis. Some other common forms of emphasis are: bold, caps, small caps, type size, color, underline or a different typeface. No matter which you choose, try to limit yourself to using only one. Combinations such as caps-bold-italic are disruptive and look clumsy.



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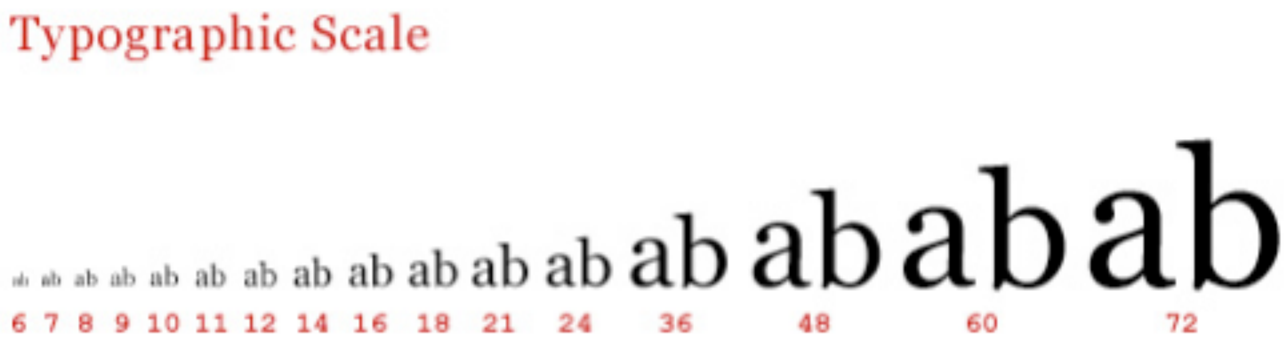
Here are some different ways of creating emphasis with CSS:

```
span {
  font-style: italic;
}

h1 {
  font-weight: bold;
}

h2 {
  text-transform: uppercase;
}

b {
  font-variant: small-caps;
}
```

Keep in mind that the font-variant style only works if the font supports the small-caps variant.

7. Scale

Always compose with a scale, whether it’s the traditional scale developed in the sixteenth century that we’re all familiar with, or an individual one. A scale is important because it **establishes a typographic hierarchy** that improves readability and creates harmony and cohesiveness within the text.



Traditional typographic sale.

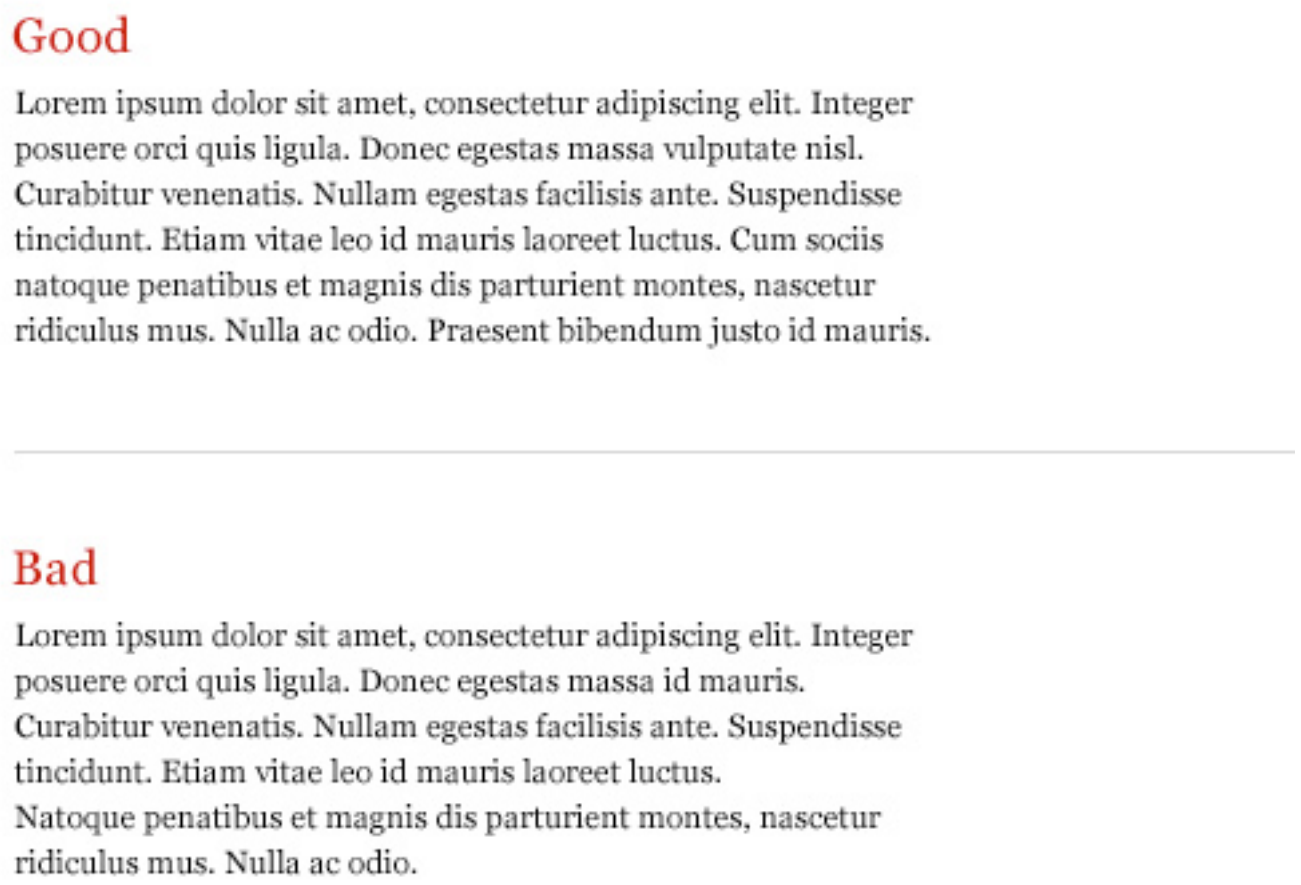
An example of a typographic scale defined in CSS:

```
h1 {
  font-size: 48px;
}

```

```
h2 {
  font-size: 36px;
}

h3 {
  font-size: 24px;
}

h4 {
  font-size: 21px;
}

h5 {
  font-size: 18px;
}

h6 {
  font-size: 16px;
}

p {
  font-size: 14px;
}
```

8. Clean Rags

When setting a block of text unjustified with a left or right alignment, be sure to keep the rag (the uneven side) balanced without any sudden “holes” or awkward shapes. A bad rag can be unsettling to the eye and distract the reader. A good rag has a “soft” unevenness, without any lines that are too long or too short. There is no way of controlling this in CSS, so to achieve a good rag you must make manual adjustments to the block of text.



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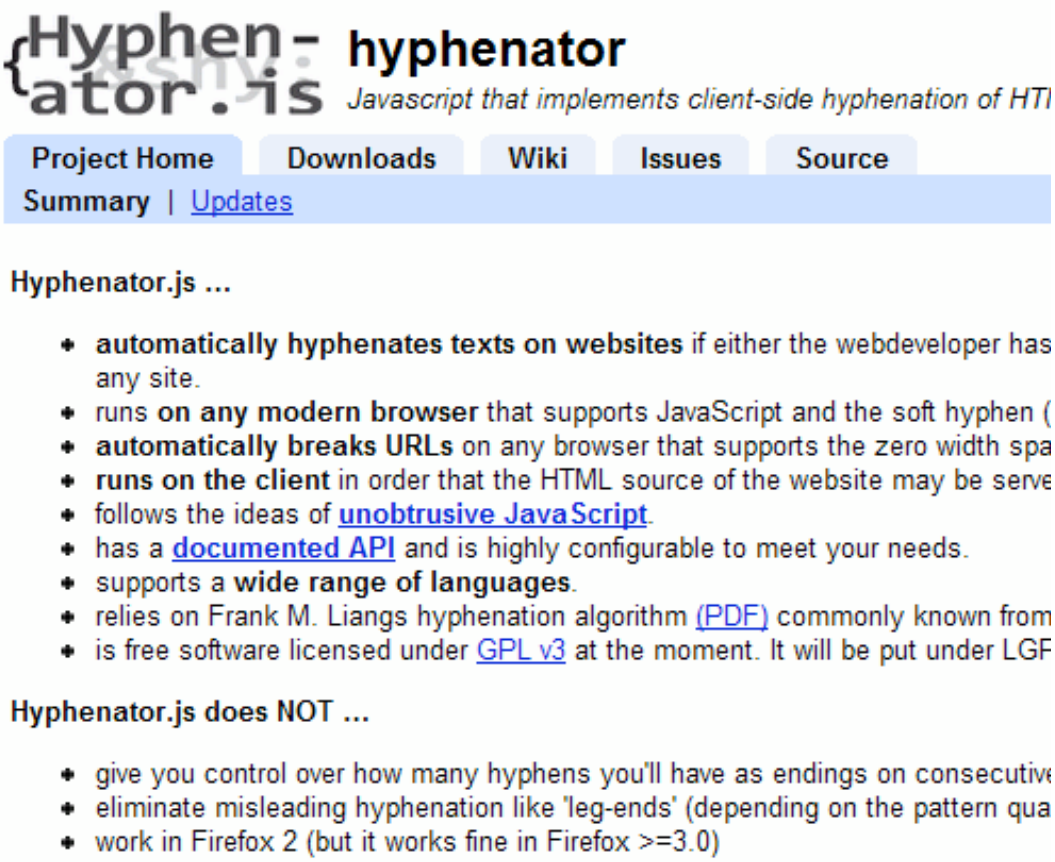
Natoque penatibus et magnis dis parturient montes, nascetur
ridiculus mus. Nulla ac odio.

Hyphenation can also help with producing clean rags, but unfortunately CSS can’t handle this at the moment. Maybe in the near future we’ll see some control in CSS 3. Not all is lost though. There are some server and client side solutions for auto hyphenation like phpHyphenator and Hyphenator as well as online generators.



hyphenator

Javascript that implements client-side hyphenation of HT

Hyphenator.js ...

- **automatically hyphenates texts on websites** if either the webdeveloper has any site.
- runs **on any modern browser** that supports JavaScript and the soft hyphen (
- **automatically breaks URLs** on any browser that supports the zero width spa
- **runs on the client** in order that the HTML source of the website may be serve
- follows the ideas of **unobtrusive JavaScript**.
- has a **documented API** and is highly configurable to meet your needs.
- supports a **wide range of languages**.
- relies on Frank M. Liangs hyphenation algorithm (PDF) commonly known from
- is free software licensed under GPL v3 at the moment. It will be put under LGF

Hyphenator.js does NOT ...

- give you control over how many hyphens you'll have as endings on consecutive
- eliminate misleading hyphenation like 'leg-ends' (depending on the pattern qua
- work in Firefox 2 (but it works fine in Firefox >=3.0)

Hyphenator.js is a Javascript-library that implements an automatic client-side hyphenation of Web-pages.

Typographic Design Patterns and Best Practices

Michael Martin

Even with a relatively limited set of options in CSS, typography can vary tremendously using pure CSS syntax. Serif or sans-serif? Large or small font? Line height, spacing, font size and padding… The list goes on and on.

To find typographic design patterns that are common in modern Web design and to resolve some common typographic issues, we conducted extensive research on 50 popular Web sites on which typography matters more than usual (or at least should matter more than usual). We've chosen popular newspapers, magazines and blogs as well as various typography-related Web sites.

We've carefully analyzed their typography and style sheets and searched for similarities and differences. We have also put together a spreadsheet of the study that displays the Web sites' various values (for example, the ratio between the line height and line length).

General Typographic Problems and Issues

Ultimately, we identified **13** general typographic problems and issues related to typographic design and tried to find answers to them through our research:

1. How popular are serif and sans-serif typefaces in body copy and headlines?

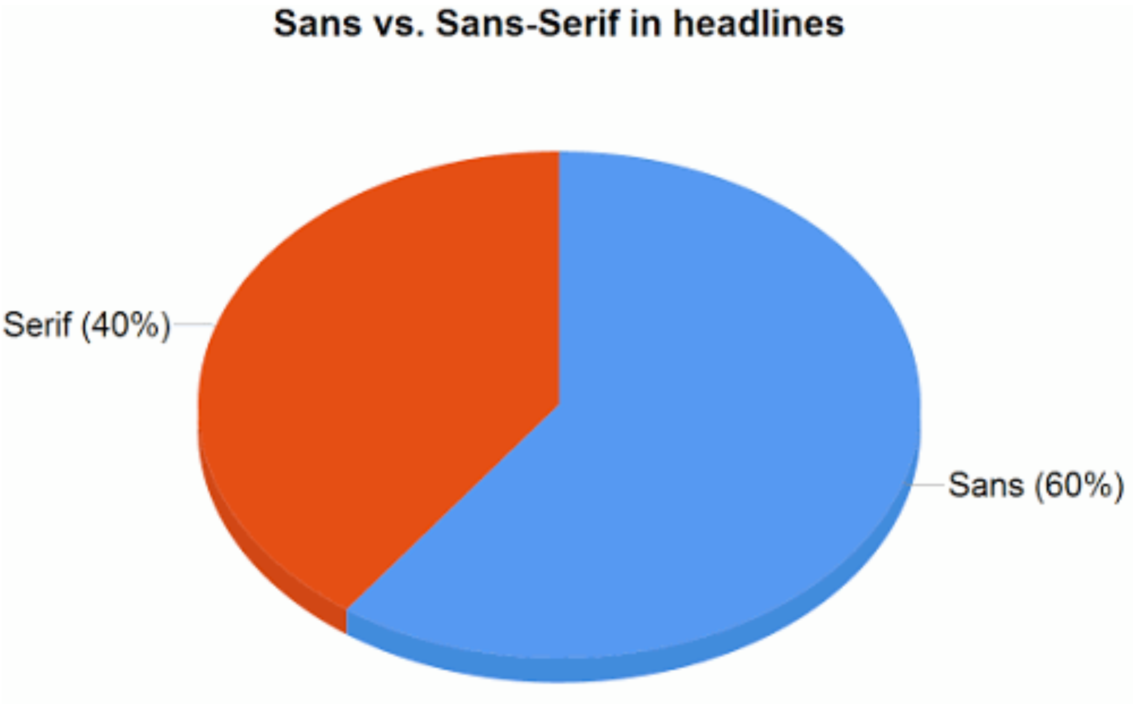
2. Which fonts are used most frequently?
3. What is the average font size?
4. What is the average ratio between the font size of headlines and body copy?
5. What is the average line height of body copy?
6. What is the average ratio between line height and font size in body copy?
7. What is the average ratio between line height and line length in body copy?
8. What is the average amount of spacing between paragraphs?
9. What is the average ratio of paragraph spacing to line height in body copy?
10. How are links styled?
11. How many characters per line are common in body copy?
12. How often are links underlined?
13. How often is font replacement (sIFR, etc.) used?

We ended up with solid data, which we evaluated and prepared for this article. Based on the statistics, we have identified several “rules of thumb” for working with type. Please note that these rules can often, but not always, be considered best practice.

1. Serif vs. Sans-serif

Whether designers should use serif or sans-serif fonts for body copy is one of the most discussed and unresolved questions about typesetting on the web. Some designers prefer to give their headlines serifs (which are short, decorative lines at the end of letter strokes) to give them more appeal. The main reason to choose a serif font for your headlines is that, at a large size, serif fonts are easy to read and look great. The contrast between a serif font for headlines and a sans-serif font for body copy can be interesting, too.

Some designers prefer serif fonts for body copy because they believe the lines at the end of letter strokes help guide readers from one letter to the next, making scanning and reading more comfortable.



According to our study, sans-serif fonts are still more popular than serif fonts for headlines, although they seem to have dropped in popularity in recent years.

60% of Web sites use sans-serif typefaces for headlines, mostly Arial, Verdana, Lucida Grande and Helvetica. Among them: CNN, ArsTechnica, Slate, BBC and NewScientist.

Only 34% of Web sites use a serif typeface for body copy. Among them:

- New York Times,
- Typographica,
- Time,
- AIGA
- Newsweek.

Most popular typefaces for ...

The most popular **serif typefaces for headlines** are **Georgia** (28%) and **Baskerville** (4%**)**.

The most popular **serif typefaces for body copy** are **Georgia** (32%) and **Times New Roman** (4%).

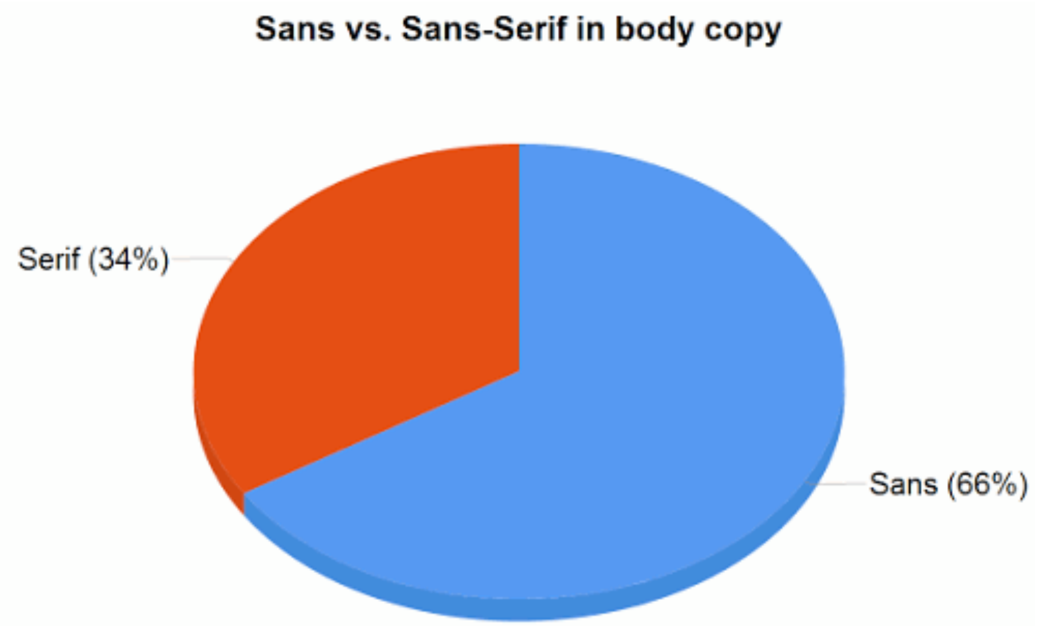
The most popular **sans-serif typefaces for headlines** are **Arial** (28%), **Helvetica** (20%) and **Verdana** (8%).

The most popular **sans-serif typefaces for body copy** are **Arial** (28%), **Verdana** (20%) and **Lucida Grande** (10%).

Two thirds of the Web sites we surveyed used sans-serif fonts for body copy. The main reason is probably because, despite the growing popularity of advanced font replacement techniques, such as Cufón, most designers stick to the core Web fonts, which essentially give them only two viable options: Georgia and Times New Roman.

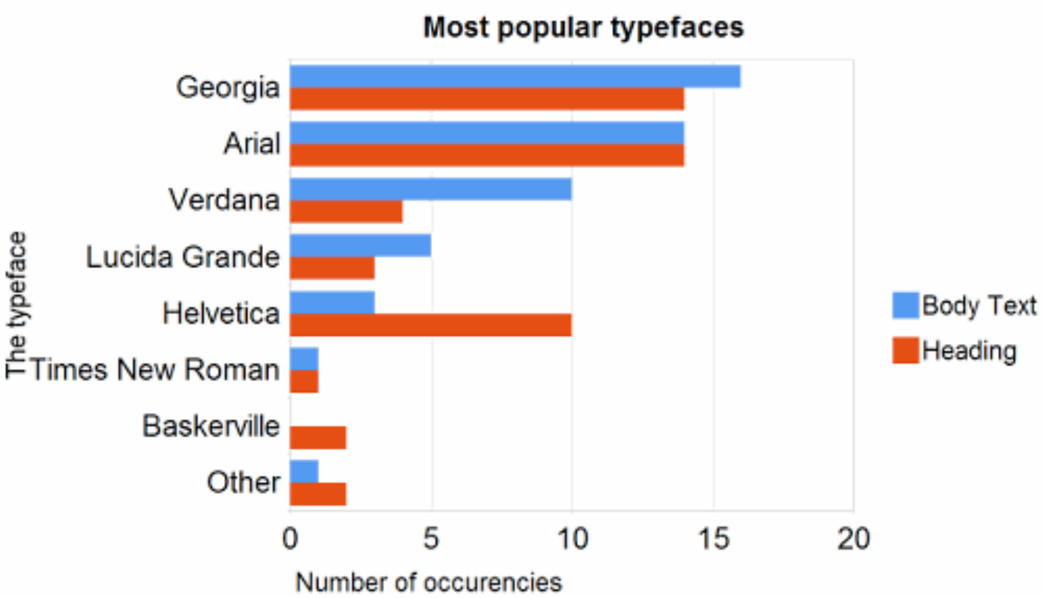
And because of the stigma attached to Times New Roman (that it often makes a modern Web site look outdated), they're left with only Georgia. Sans-serif fonts used to offer a wider variety of options for the web.

This limitation in choice, however, will soon be overcome by the use of the @font-face rule and web font embedding services.



2. Which Typeface Is Most Popular?

Surprisingly, despite the growing popularity of font replacement techniques and growing availability of new pre-installed fonts (e.g. Windows Vista and Mac fonts), designs in our study mainly used the traditional, core Web fonts, the only exceptions being Lucida Grande (which comes installed only on Macs), Helvetica and Baskerville.



As one would expect, Arial, Georgia and Verdana are used for the majority of body copy today. In our study, around 80% of Web sites used one of these three fonts. For the remaining 20%, designers' favorite Helvetica is a popular choice, as is Lucida Grande.

With options such as Verdana and Arial available as fall-backs, a designer really has no reason not to specify other non-standard fonts to achieve the best effect.

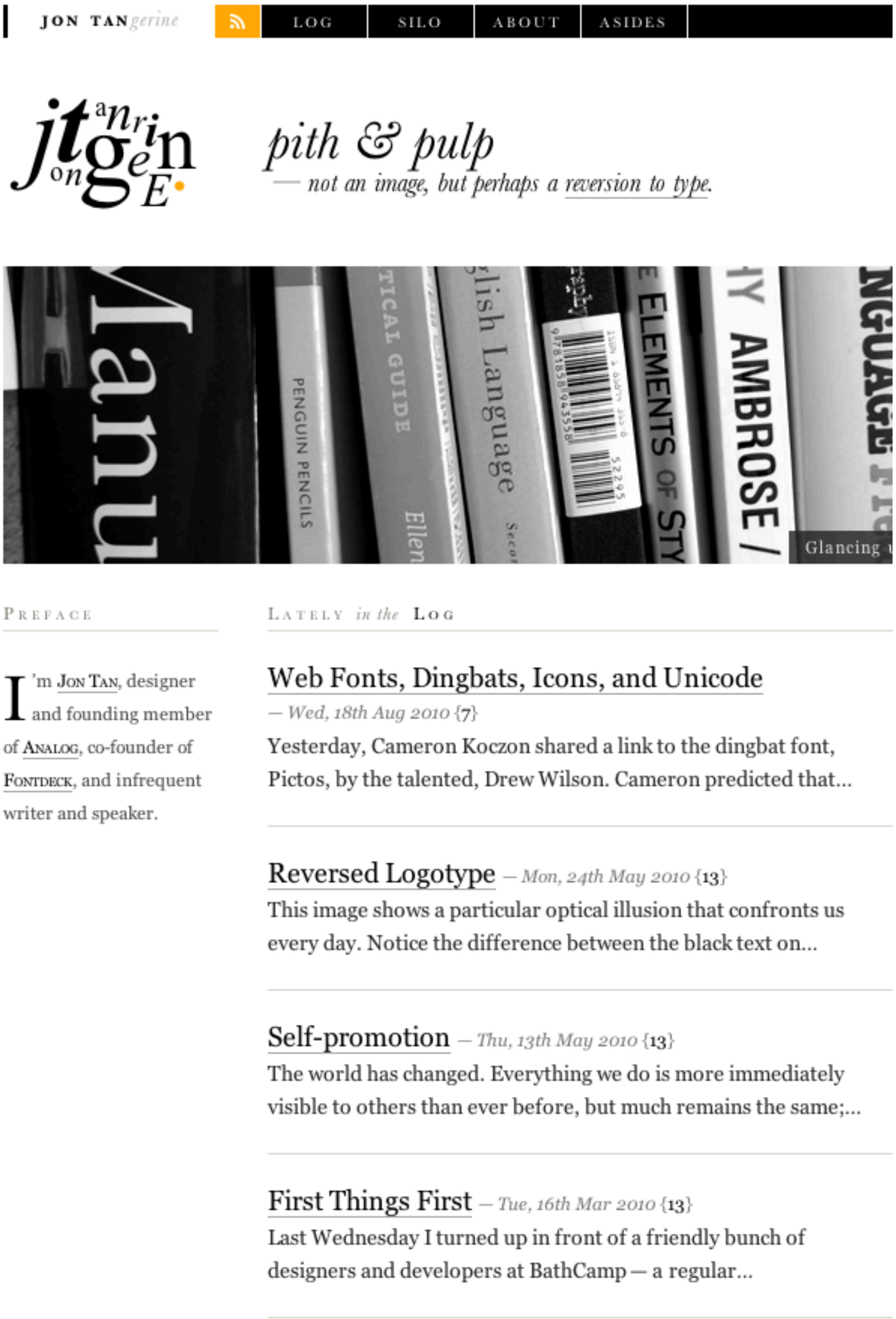
You can learn more about advanced **CSS font stacks** in this book's article Guide to CSS Font Stacks

Further **resources on the web** are Nathan Ford's article Better CSS Font Stacks and CodeStyle's Build Better CSS Font Stacks.

Popular Types for Headlines

Verdana is used minimally for headlines. Only 10 Web sites use it for body copy to begin with, and only four use it for headlines. The main reason is that Verdana puts a lot of spacing between letters, which makes it not as tidy to read at a large size.

If you are going to use Verdana for headlines, you may want to take advantage of the CSS letter-spacing property. Georgia and Arial are the most popular fonts for headings.



pith & pulp

— not an image, but perhaps a reversion to type.

PREFACE

I'm JON TAN, designer and founding member of ANALOG, co-founder of FONTDECK, and infrequent writer and speaker.

LATELY *in the* LOG

Web Fonts, Dingbats, Icons, and Unicode

— *Wed, 18th Aug 2010* {7}

Yesterday, Cameron Koczon shared a link to the dingbat font, Pictos, by the talented, Drew Wilson. Cameron predicted that…

Reversed Logotype — *Mon, 24th May 2010* {13}

This image shows a particular optical illusion that confronts us every day. Notice the difference between the black text on…

Self-promotion — *Thu, 13th May 2010* {13}

The world has changed. Everything we do is more immediately visible to others than ever before, but much remains the same;…

First Things First — *Tue, 16th Mar 2010* {13}

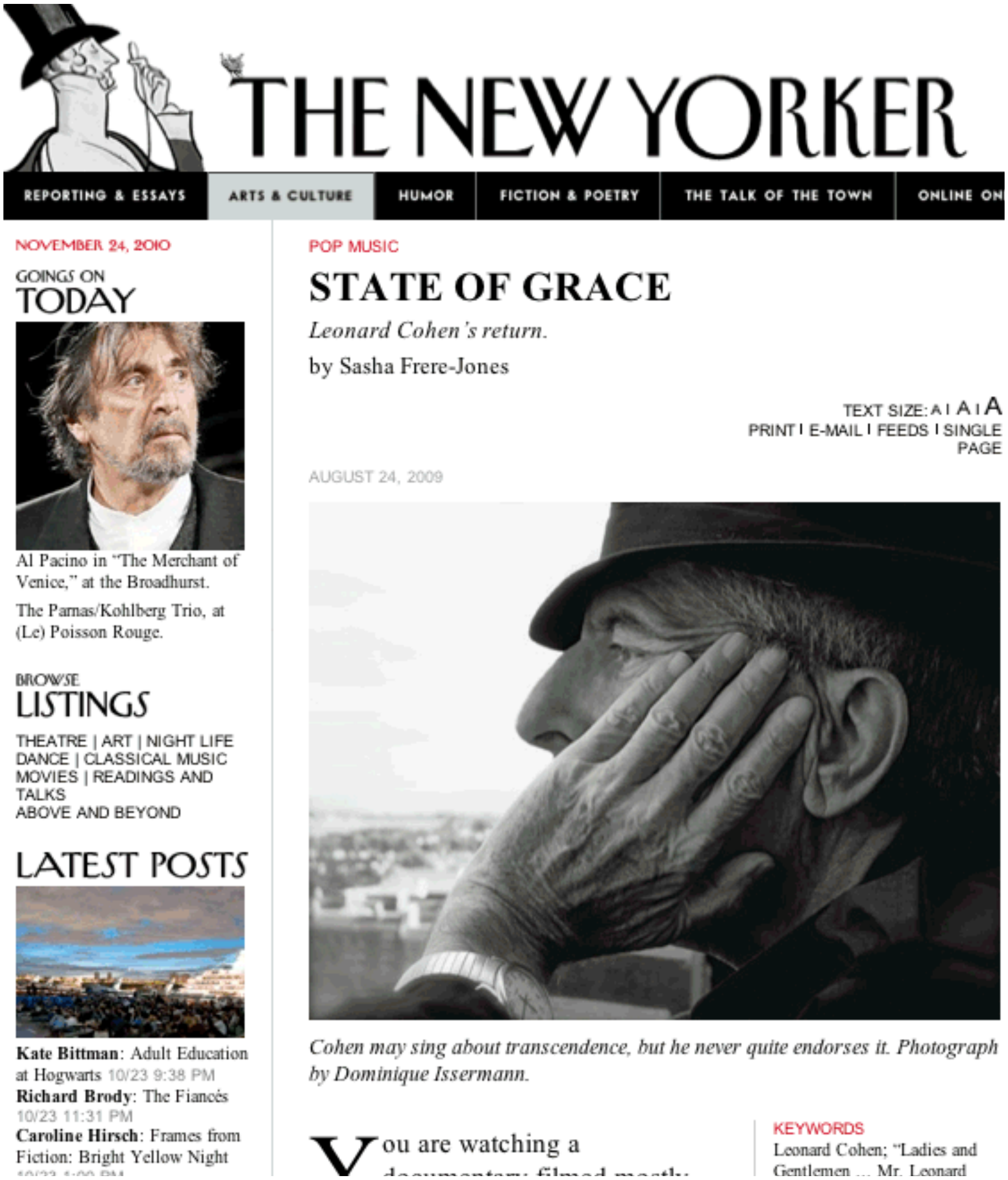
Last Wednesday I turned up in front of a friendly bunch of designers and developers at BathCamp — a regular…

Jon Tan uses serif typeface Baskerville for headlines and serif typeface Georgia for body copy.

Finally, we note that “alternative” fonts are used much more for headlines than for body copy. Designers seem more willing to experiment with their headings than with the main body. If you want to bring some typographic variation into your next design, headings may be the easiest place to start.

3. Light Or Dark Background?

We were curious to learn the extent to which designers were willing to experiment with dark background colors. We looked out for any typography-oriented Web sites that had a dark color scheme and were surprised to find not a single one.



Al Pacino in "The Merchant of Venice," at the Broadhurst.

The Parnas/Kohlberg Trio, at (Le) Poisson Rouge.

Kate Bittman: Adult Education at Hogwarts 10/23 9:38 PM
Richard Brody: The Fiancés 10/23 11:31 PM
Caroline Hirsch: Frames from Fiction: Bright Yellow Night

POP MUSIC

STATE OF GRACE

Leonard Cohen's return.

by Sasha Frere-Jones

AUGUST 24, 2009

Cohen may sing about transcendence, but he never quite endorses it. Photograph by Dominique Issermann.

You are watching a

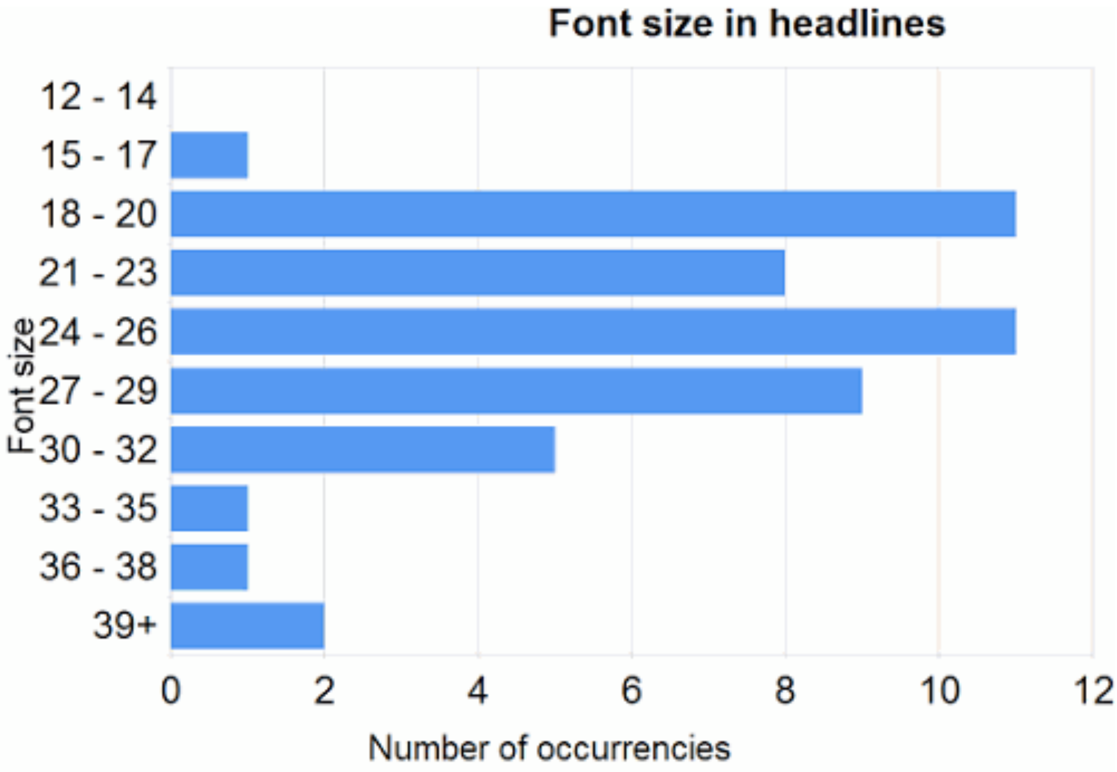
Leonard Cohen; "Ladies and Gentlemen ... Mr. Leonard

[The New Yorker](https://www.newyorker.com) has a light color scheme, with Times New Roman used for headlines and body copy.

Pure white background for body copy won by a landslide. However, many of the designs avoid the high contrast of pure white on pure black; text color is often made a bit lighter than pure black. Designers clearly focus on legibility and avoid experimenting with background colors. The contrast of black on white is easy to read and is, at least among these Web sites, the status quo.

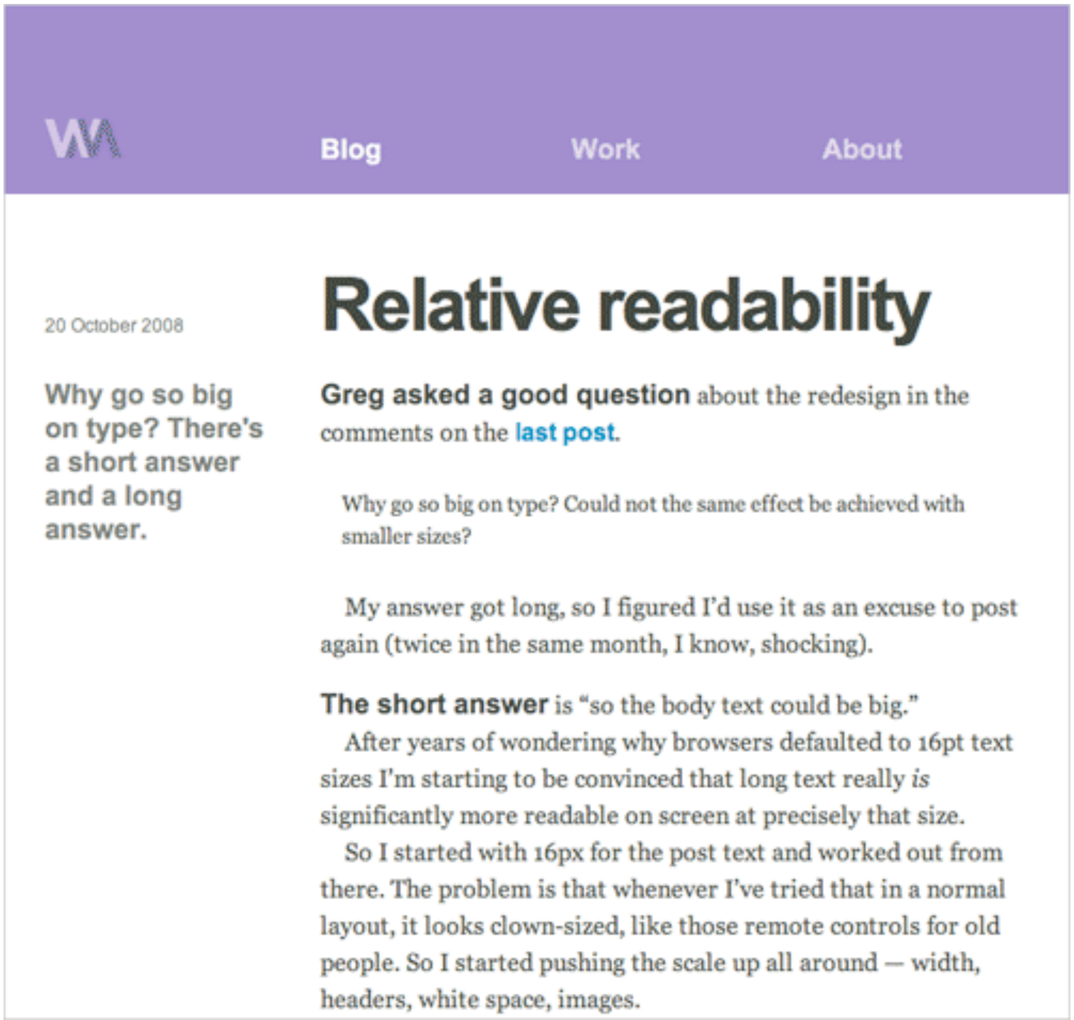
4. Average Font Size For Headlines

Of course, the choice of headline font size depends on the font used in the design. In any case, in our study by far the most popular font sizes ranged from 18 to 29 pixels, with 18 to 20 pixels and 24 to 26 pixels being the most popular choices.



Our study didn't yield any clear winners. The average font size for headings is 25.6 pixels. But note that any size between 18 and 29 pixels could be effective; it depends, after all, on how your headings fit the overall design of your Web site. Still, you could try experimenting with larger sizes, because displays are always getting larger, as are display resolutions.

An obvious outlier is Wilson Miner (screenshot below), who uses a massive font size of 48 pixels for his headlines. His Web site is a special case, though, because all of his posts have extremely short titles, only a few words.



Relative readability

20 October 2008

Why go so big on type? There's a short answer and a long answer.

Greg asked a good question about the redesign in the comments on the last post.

> Why go so big on type? Could not the same effect be achieved with smaller sizes?

My answer got long, so I figured I'd use it as an excuse to post again (twice in the same month, I know, shocking).

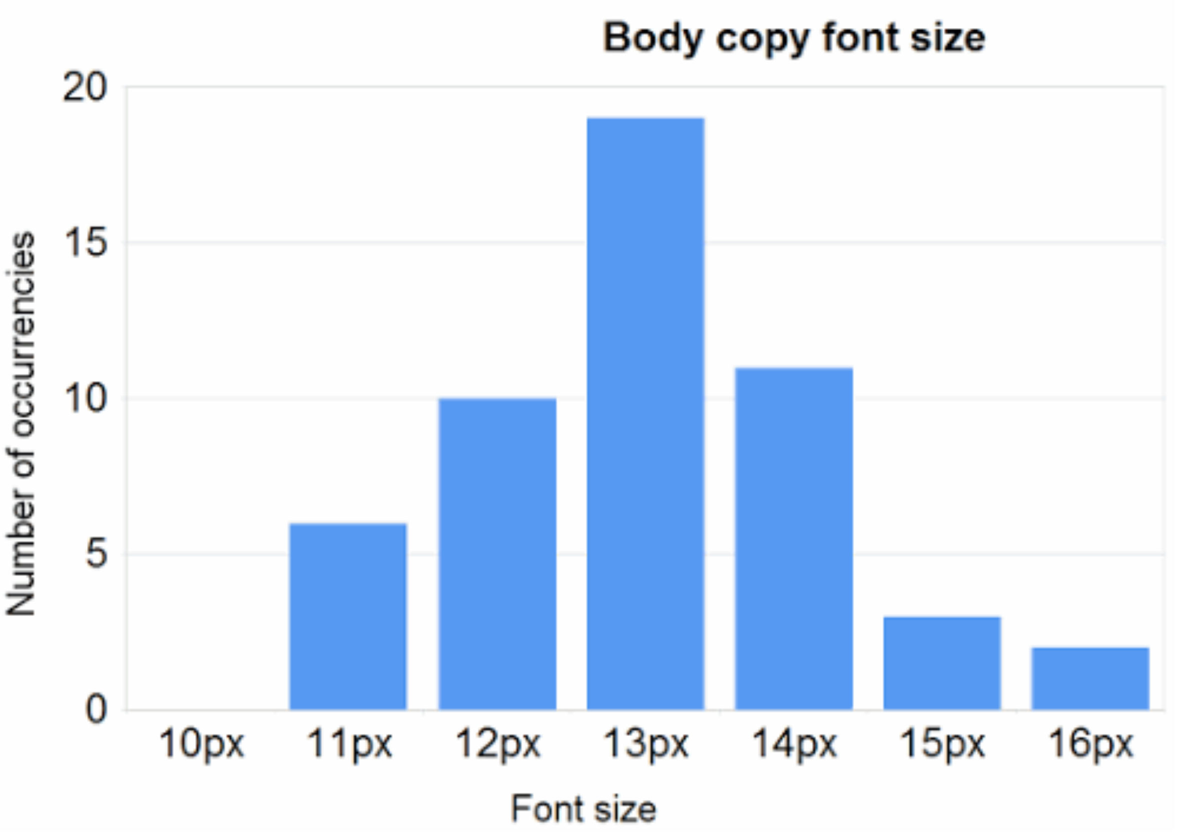
The short answer is "so the body text could be big."

After years of wondering why browsers defaulted to 16pt text sizes I'm starting to be convinced that long text really *is* significantly more readable on screen at precisely that size.

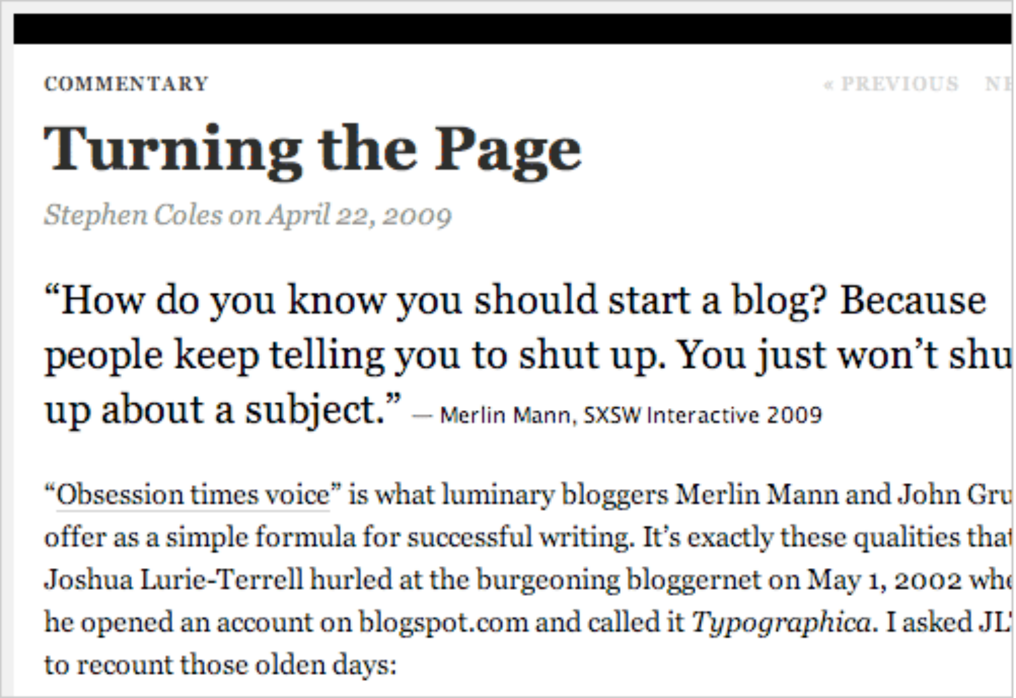
So I started with 16px for the post text and worked out from there. The problem is that whenever I've tried that in a normal layout, it looks clown-sized, like those remote controls for old people. So I started pushing the scale up all around — width, headers, white space, images.

5. Average Font Size For Body Copy

Do you remember about seven years ago when Web designs had tiny, barely readable elements, and body copy was set to 8 pixels in Tahoma? Small font sizes are out, and more and more modern designers are turning to large font sizes. From our sample size, we saw a clear tendency towards sizes between 12 and 14 pixels. The most popular font size (38%) is 13 pixels, with 14 pixels slightly more popular than 12 pixels. Overall, the average font size for body copy is 13 pixels.



We noted (as one would expect) more and more attention being paid to the smallest typographic details. Dashes, quotes, footnotes, author names, introductory text and paragraphs have been carefully set, with optimal legibility in mind. Type setting is usually very consistent, with a lot of white space, leading and padding.



COMMENTARY

Turning the Page

Stephen Coles on April 22, 2009

“How do you know you should start a blog? Because people keep telling you to shut up. You just won’t shu up about a subject.” — Merlin Mann, SXSW Interactive 2009

“Obsession times voice” is what luminary bloggers Merlin Mann and John Gru offer as a simple formula for successful writing. It’s exactly these qualities that Joshua Lurie-Terrell hurled at the burgeoning bloggernet on May 1, 2002 whe he opened an account on blogspot.com and called it *Typographica*. I asked JL to recount those olden days:

Typographica uses a large font size for the introductory paragraphs of its articles, and then reverts to a normal size for the rest of text.

Heading to Body Font-Size Ratio

To better understand the relationship between heading and body font size, we divided each Web site’s heading font size by its body font size. We took the average of these ratios and derived a rule of thumb for you to work with:

Heading font size ÷ Body copy font size = 1.96

The overall value, then, is 1.96. This means that when you have chosen a font size for your body copy, you may want to multiply it by 2 to get your heading font size. This, of course, depends on your style; the rule of thumb won’t necessarily give you the optimal size for your particular design. Another option is to use a traditional scale (6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 21, 24, 36, 48, 60, 72) or the Fibonacci sequence (e.g. 16 – 24 – 40 – 64 – 104) to get natural typographic results.

6. Optimal Line Height For Body Copy

Leading (or line height) will always depend on your chosen font size and measure (or line length). Generally, the longer the measure, the longer the leading should be. Therefore, presenting a chart of the most popular choices for leading in pixels wouldn't make sense here.

Relative units are often more appropriate

More appropriate would be for you to use a relative unit, such as an **em** or **percentage value**, that determines the relation between leading and measure and between leading and font size.

According to our study:

line height (pixels) ÷ body copy font size (pixels) = 1.48

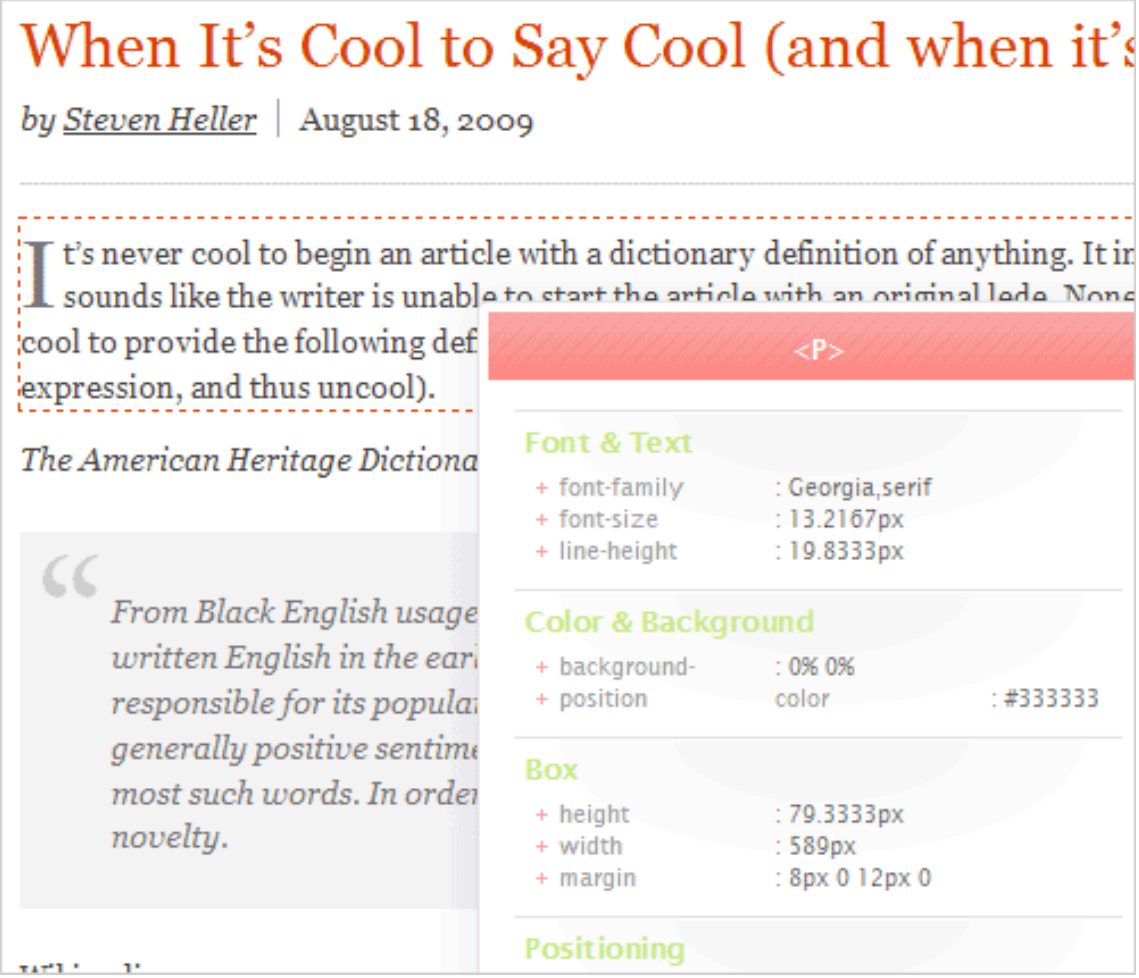
Note that 1.5 is a value that is commonly recommended in classic typographic books, so our study backs up this rule of thumb. Very few Web sites use anything less than that. The number of Web sites that go above 1.48 decreases as you get further from this value.

line length (pixels) ÷ line height (pixels) = 27.8

The average line length is 538.64 pixels (excluding margins and paddings) which is pretty large, considering that many Web sites still use 12 to 13 pixels for their body copy font size.

space between paragraphs (pixels) ÷ line height (pixels) = 0.754

We were surprised by this result. It turns out that paragraph spacing (i.e. the space between the last line of one paragraph and the first line of the next) rarely equals the leading (which would be the main characteristic of perfect vertical rhythm). More often, paragraph spacing is just 75% of the paragraph leading. The reason may be that leading usually includes the space taken up by descenders, and because most characters do not have descenders, additional white space is created under the line.



When It's Cool to Say Cool (and when it'

by Steven Heller | August 18, 2009

It's never cool to begin an article with a dictionary definition of anything. It ir
sounds like the writer is unable to start the article with an original lede. None
cool to provide the following def
expression, and thus uncool).

The American Heritage Dictiona

“ From Black English usage
written English in the ear
responsible for its popula
generally positive sentim
most such words. In orde
novelty.

<P>

Font & Text
+ font-family : Georgia,serif
+ font-size : 13.2167px
+ line-height : 19.8333px

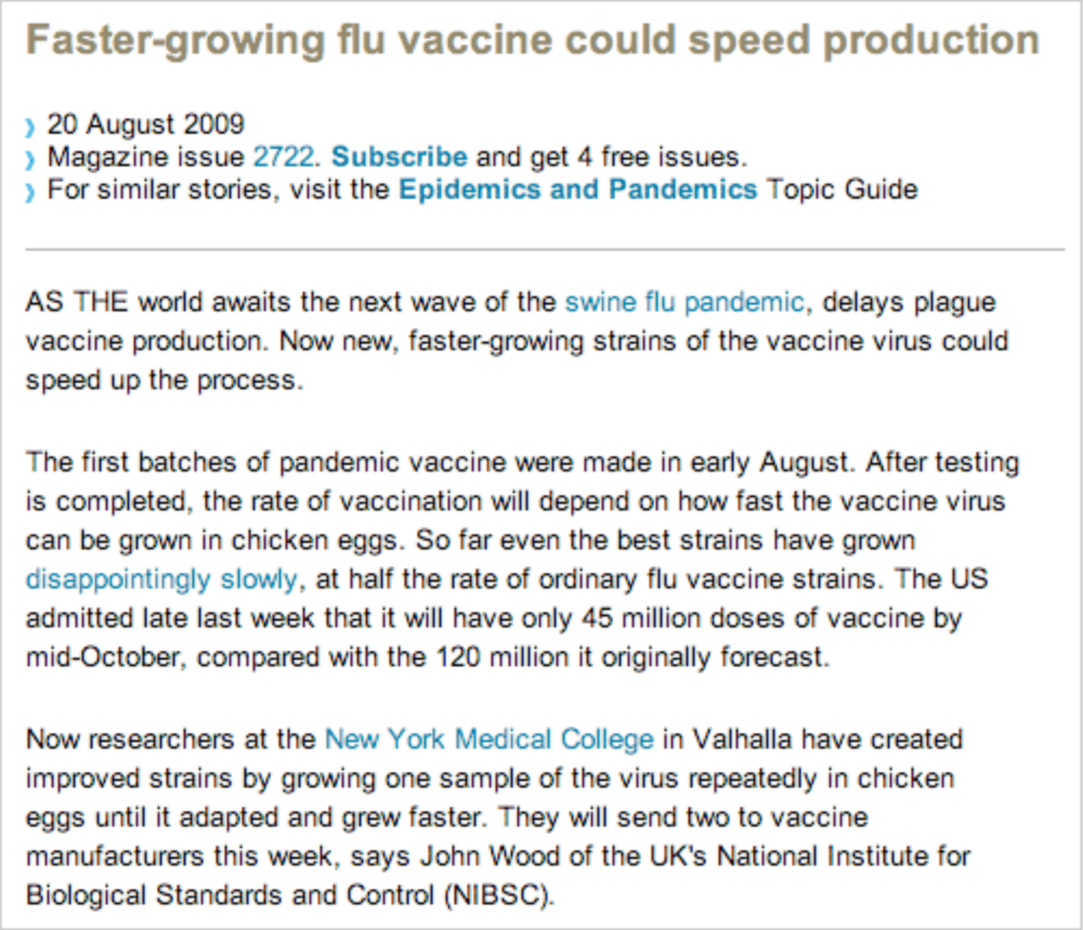
Color & Background
+ background- : 0% 0%
+ position color : #333333

Box
+ height : 79.3333px
+ width : 589px
+ margin : 8px 0 12px 0

Positioning

[AIGA](#) is a perfect example of optimal leading. Its font size is 13.21 pixels (converted from ems) and its line height is 19.833 pixels (conversion from ems). In fact, 19.8333 ÷ 13.2167 = 1.5011.

So, once you have decided on your body copy font size, multiplying this value by 1.5 will give you the optimal line height. Once you've got that, you can multiply this new value by 27.8 to get your optimal line length. Note that the layout will also need gutters, margins and padding to let the body copy breathe. There are handy tools that help you figure out the best lead.



Faster-growing flu vaccine could speed production

- 20 August 2009
- Magazine issue 2722. **Subscribe** and get 4 free issues.
- For similar stories, visit the **Epidemics and Pandemics** Topic Guide

AS THE world awaits the next wave of the swine flu pandemic, delays plague vaccine production. Now new, faster-growing strains of the vaccine virus could speed up the process.

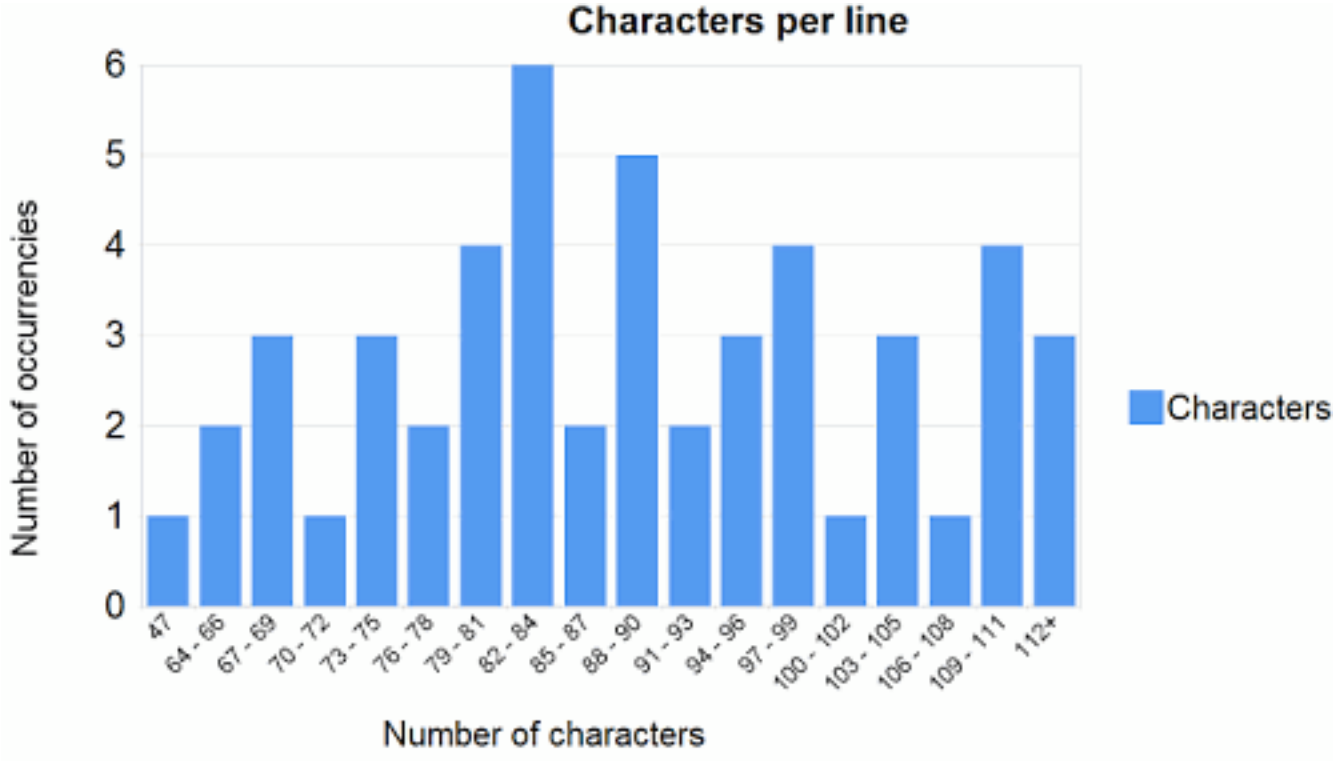
The first batches of pandemic vaccine were made in early August. After testing is completed, the rate of vaccination will depend on how fast the vaccine virus can be grown in chicken eggs. So far even the best strains have grown disappointingly slowly, at half the rate of ordinary flu vaccine strains. The US admitted late last week that it will have only 45 million doses of vaccine by mid-October, compared with the 120 million it originally forecast.

Now researchers at the New York Medical College in Valhalla have created improved strains by growing one sample of the virus repeatedly in chicken eggs until it adapted and grew faster. They will send two to vaccine manufacturers this week, says John Wood of the UK's National Institute for Biological Standards and Control (NIBSC).

The New Scientist has 20 pixels of spacing between paragraphs.

7. How Many Characters Per Line?

According to a classic rule of web typography, 55 to 75 is an optimal number of characters per line. Surprisingly, our study shows that most Web sites have a higher number. We counted how many characters could fit on one line using the design’s default font size. The result, which is an average of 88.74 characters per line (maximum), is extremely high. Of course, this maximal number is different from the average number of characters per line, which in general ranges between 75 and 85 characters per line. Still, the range is way above the conventional range — quite peculiar.



Between 73 and 90 characters per line is a popular choice among designers, yet we also found outliers: Monocle (47 characters per line) and Boxes and Arrows (125 characters per line). To get a more exact reading for each Web site, you would need to take an average character count from multiple lines.

Other Findings

46% of Web sites underlined the links in their body copy, while the others highlighted only with color or a bold font weight. 6% of Web sites used some kind of image replacement for headings or body copy (e.g. Monocle, New Yorker, Newsweek). 96% of Web sites do not justify text.

Web sites gave their text a left padding of on average 11.7 pixels (counting from the left content area border).

Conclusion

The study shows a clear set of common practices and guidelines for setting type in Web design. Note, though, that **these findings are not scientific** and should serve only as rough guidelines:

- Either serif or sans-serif fonts are fine for body copy and headings, but **sans-serif fonts are still more popular for both**.
- Common choices for **headlines** are:
    - Georgia,
    - Arial and
    - Helvetica.
- Common choices for **body copy** are:
    - Georgia,
    - Arial,
    - Verdana and
    - Lucida Grande..

- The most popular **font size for headings** is a range between 18 and 29 pixels
- The most popular **font size for body copy** is a range between 12 and 14 pixels.
- Header font size ÷ Body copy font size = 1.96.
- Line height (pixels) ÷ body copy font size (pixels) = 1.48.
- Line length (pixels) ÷ line height (pixels) = 27.8.
- Space between paragraphs (pixels) ÷ line height (pixels) = 0.754.
- The optimal number of characters per line is between 55 and 75, but between 75 and 85 characters per line is more popular,
- Body text is left-aligned, image replacement is rarely used and links are either underlined or highlighted with bold or color.

Of course these “rules” aren’t set in stone. Rather, they are a set of rough guidelines that you can use as a basis for setting typography. Every Web site is unique, and you may want to modify your choices at each stage of your design to suit your layout. You can also take a look at the spreadsheet of the study and export its data for further analysis.

The Typography Dress Code: Principles of Choosing and Using Typefaces

Dan Mayer

For many beginners, the task of picking fonts is a mystifying process. There seem to be endless choices — from normal, conventional-looking fonts to novelty candy cane fonts and bunny fonts — with no way of understanding the options, only never-ending lists of categories and recommendations. Selecting the right typeface is a mixture of firm rules and loose intuition, and takes years of experience to develop a feeling for. Here are five guidelines for picking and using fonts that I've developed in the course of using and teaching typography.

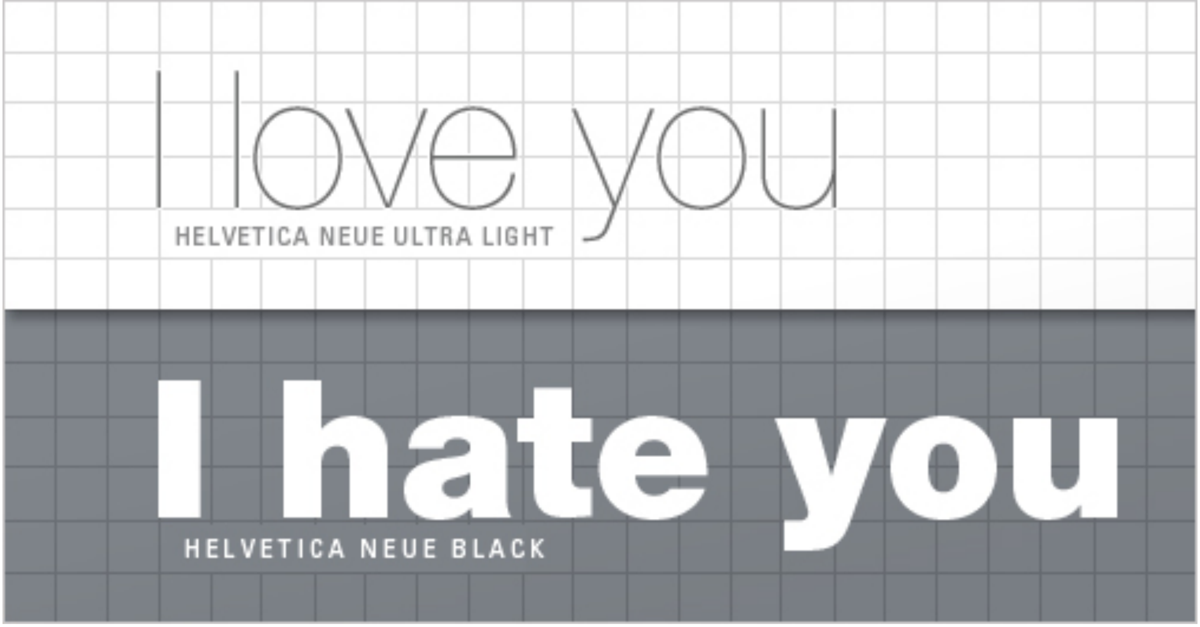
Dress For The Occasion

Many of my beginning students go about picking a font as though they were searching for new music to listen to: they assess the personality of each face and look for something unique and distinctive that expresses their particular aesthetic taste, perspective and personal history. This approach is problematic, because it places too much importance on individuality.

For better or for worse, picking a typeface is more like getting dressed in the morning. Just as with clothing, there's a distinction between typefaces that are expressive and stylish versus those that are useful and appropriate to many situations, and our job is to try to find the right balance for the occasion. **While appropriateness isn't a sexy concept, it's the acid test that should guide our choice of font.**

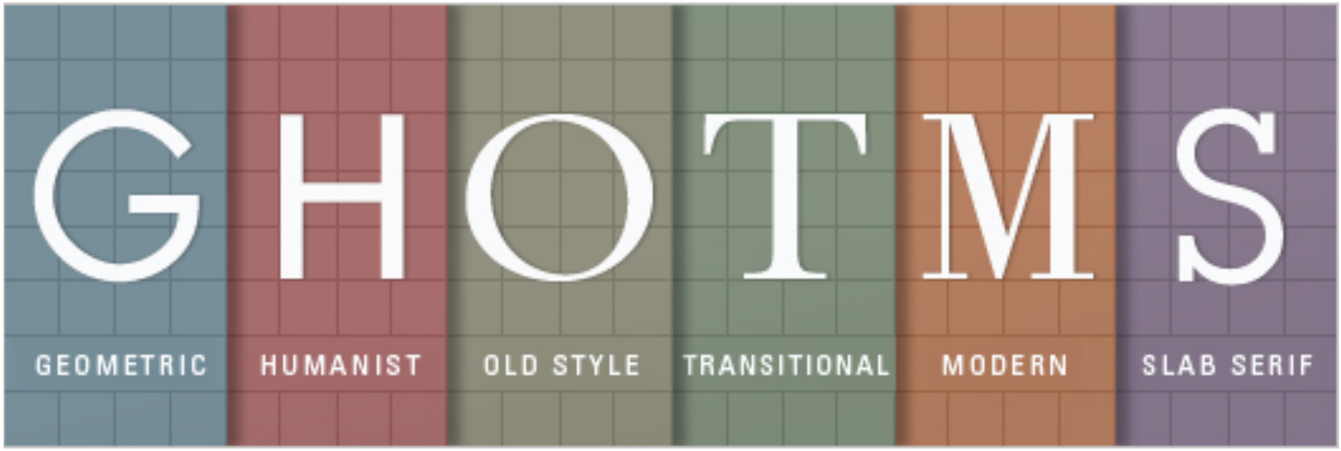
My "favorite" piece of clothing is probably an outlandish pair of 70s flare bellbottoms that I bought at a thrift store, but the reality is that these don't make it out of my closet very often outside of Halloween. Every designer has a few favorite fonts like this — expressive personal favorites that we hold onto and wait for the perfect festive occasion to use. More often, I find myself putting on the same old pair of Levis morning after morning. It's not that I like these better than my cherished flares exactly… I just seem to wind up wearing them most of the time.

Every designer has a few workhorse typefaces that are like comfortable jeans: they go with everything, they seem to adapt to their surroundings and become more relaxed or more formal as the occasion calls for, and they just seem to come out of the closet day after day. Usually, these are faces that have a number of weights (Light, Regular, Bold) and/or cuts (Italic, Condensed). My particular safety blankets are: Myriad, Gotham, DIN,Akzidenz Grotesk and Interstate among the sans; Mercury, Electra and Perpetua among the serif faces.



A large type family like **Helvetica Neue** can be used to express a range of voices and emotions. Versatile and comfortable to work with, these faces are like a favorite pair of jeans for designers.

Know Your Families: Grouping Fonts

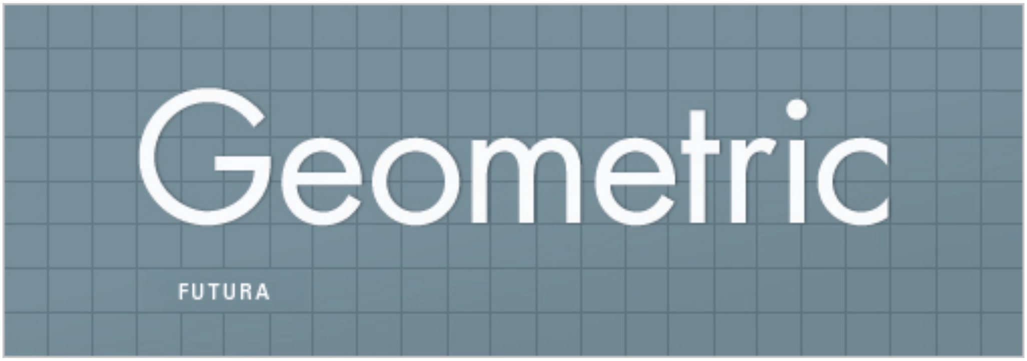


The clothing analogy gives us a good idea of what kind of closet we need to put together. The next challenge is to develop some kind of structure by which we can mentally categorize the different typefaces we run across.

Typefaces can be divided and subdivided into dozens of categories (Scotch Modern, anybody?), but we only really need to keep track of five groups to establish a working understanding of the majority of type being used in the present-day landscape.

The following list is not meant as a comprehensive classification of each and every category of type (there are plenty of great sites on the web that already tackle this, such as Typedia's type classifications) but rather as a manageable shorthand overview of key groups. Let's look at two major groups without serifs (serifs being the little feet at the ends of the letterforms), two with serifs, and one outlier (with big feet).

1. Geometric Sans



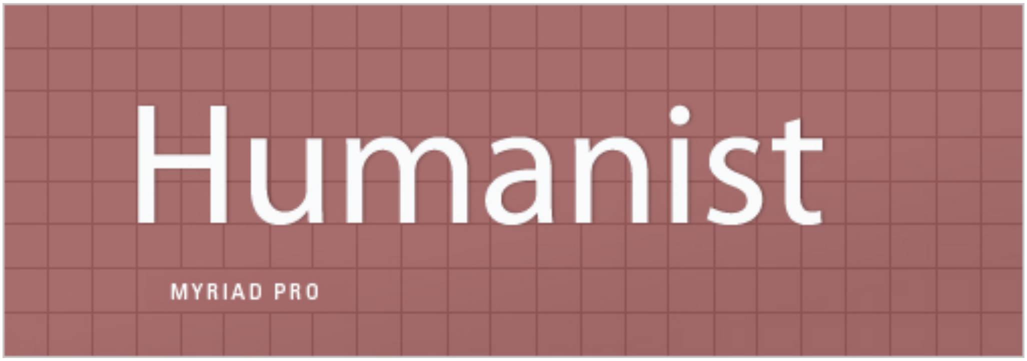
I'm actually combining three different groups here (Geometric, Realist and Grotesk), but there is enough in common between these groups that we can think of them as one entity for now. Geometric Sans-Serifs are those faces that are based on strict geometric forms. The individual letter forms of a Geometric Sans often have strokes that are all the same width and frequently evidence a kind of "less is more" minimalism in their design.

Examples of Geometric/Realist/Grotesk Sans:

- Helvetica
- Univers
- Futura
- Avant Garde
- Akzidenz Grotesk
- Franklin Gothic
- Gotham

At their best, Geometric Sans are clear, objective, modern, universal; at their worst, cold, impersonal, boring. A classic Geometric Sans is like a beautifully designed airport: it’s impressive, modern and useful, but we have to think twice about whether or not we’d like to live there.

2. Humanist Sans



These are Sans faces that are derived from handwriting — as clean and modern as some of them may look, they still retain something inescapably human at their root. Compare the ‘t’ in the image above to the ‘t’ in

‘Geometric’ and note how much more detail and idiosyncrasy the Humanist ‘t’ has.

Examples of Humanist Sans:

- Gill Sans
- Frutiger
- Myriad
- Optima
- Verdana

This is the essence of the Humanist Sans: whereas Geometric Sans are typically designed to be as simple as possible, the letter forms of a Humanist font generally have more detail, less consistency, and frequently involve thinner and thicker stoke weights — after all they come from our handwriting, which is something individuated. At their best, Humanist Sans manage to have it both ways: modern yet human, clear yet empathetic. At their worst, they seem wishy-washy and fake, the hand servants of corporate insincerity.

3. Old Style

Old Style
BEMBO

Also referred to as 'Antiqua' or 'Venetian', these are our oldest typefaces, the result of centuries of incremental development of our calligraphic forms. Old Style faces are marked by little contrast between thick and thin (as the technical restrictions of the time didn't allow for it), and the curved letter forms tend to tilt to the left (just as calligraphy tilts).

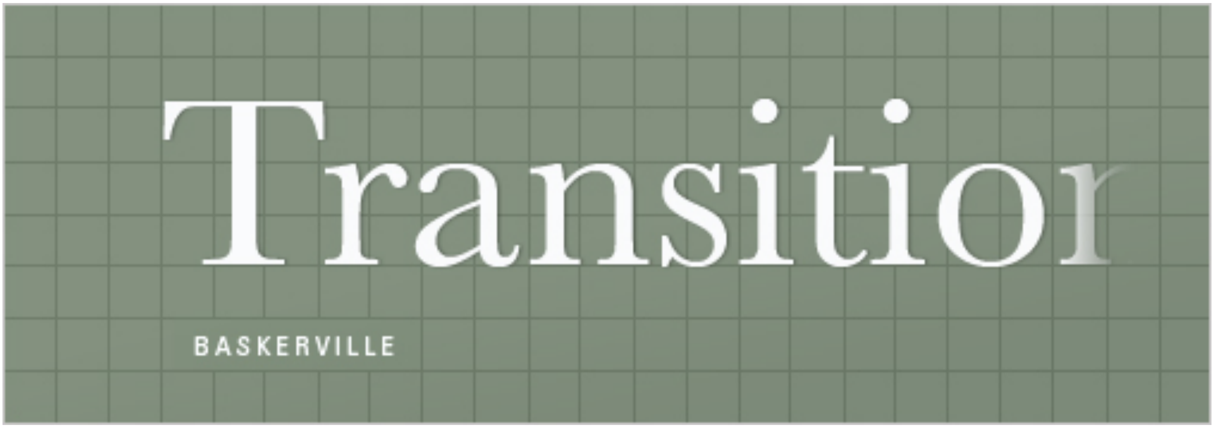
Old Style faces at their best are classic, traditional, readable and at their worst are... well, classic and traditional.

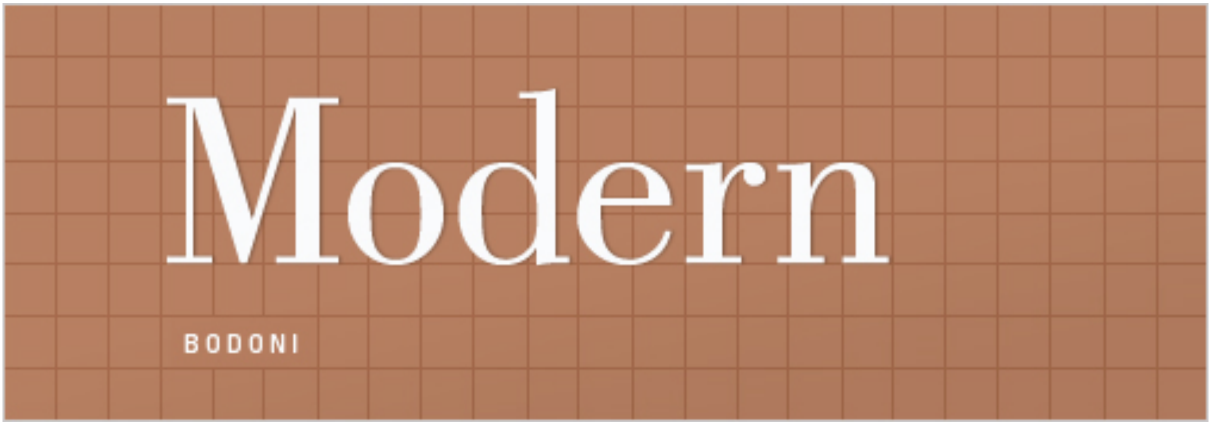
Examples of Old Style:

- Jenson
- Bembo
- Palatino
- Garamond

Garamond especially is viewed as traditional, because it was considered to be so perfect at the time of its creation that no one really tried much to improve on it for more than a century and a half.

4. Transitional and Modern





An outgrowth of Enlightenment thinking, Transitional (mid 18th Century) and Modern (late 18th century, not to be confused with mid 20th century modernism) typefaces emerged as type designers experimented with making their letterforms more geometric, sharp and virtuosic than the unassuming faces of the Old Style period.

Transitional faces marked a modest advancement in this direction – although Baskerville, a quintessential Transitional typeface, appeared so sharp to onlookers that people actually believed it could hurt one's vision to look at it.

In carving Modernist punches, type designers indulged in a kind of virtuosic demonstration of contrasting thick and thin strokes – much of the development was spurred by a competition between two rival designers who cut similar faces, Bodoni and Didot. At their best, transitional and modern faces seem strong, stylish, dynamic. At their worst, they seem neither here nor there – too conspicuous and baroque to be classic, too stodgy to be truly modern.

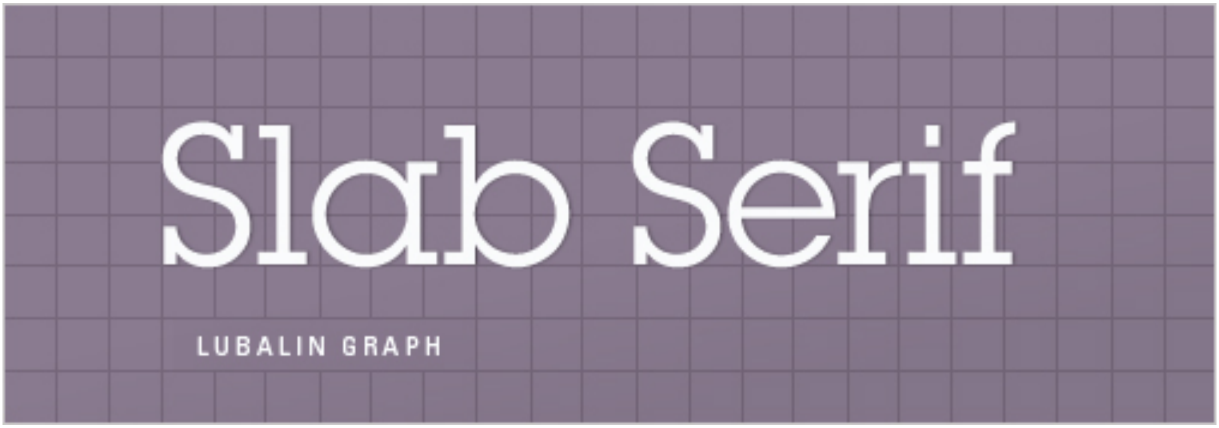
Examples of transitional typefaces:

- Times New Roman
- Baskerville

Examples of Modern serifs:

- Bodoni
- Didot

5. Slab Serifs



Also known as 'Egyptian', the Slab Serif is a wild card that has come strongly back into vogue in recent years. Slab Serifs usually have strokes like those of sans faces (that is, simple forms with relatively little contrast between thick and thin) but with solid, rectangular shoes stuck on the end. Slab

Serifs are an outlier in the sense that they convey very specific − and yet often quite contradictory − associations: sometimes the thinker, sometimes the tough guy; sometimes the bully, sometimes the nerd; sometimes the urban sophisticate, sometimes the cowboy.

Examples of Slab Serifs:

- Clarendon, Rockwell
- Courier
- Lubalin Graph
- Archer

They can convey a sense of authority, in the case of heavy versions like Rockwell, but they can also be quite friendly, as in the recent favorite Archer. Many slab serifs seem to express an urban character (such as Rockwell, Courier and Lubalin), but when applied in a different context (especially Clarendon) they strongly recall the American Frontier and the kind of rural, vernacular signage that appears in photos from this period. Slab Serifs are hard to generalize about as a group, but their distinctive blocky serifs function something like a pair of horn-rimmed glasses: they add a distinctive wrinkle to anything, but can easily become overly conspicuous in the wrong surroundings.

Don’t Be a Wimp: The Principle of Decisive Contrast

So, now that we know our families and some classic examples of each, we need to decide how to mix and match and – most importantly – whether to mix and match at all. Most of the time, one typeface will do, especially if it’s one of our workhorses with many different weights that work together.

If we reach a point where we want to add a second face to the mix, it's always good to observe this simple rule: keep it exactly the same, or change it a lot – avoid wimpy, incremental variations.

Correspondance and Contrast — Comfortable Coexistance

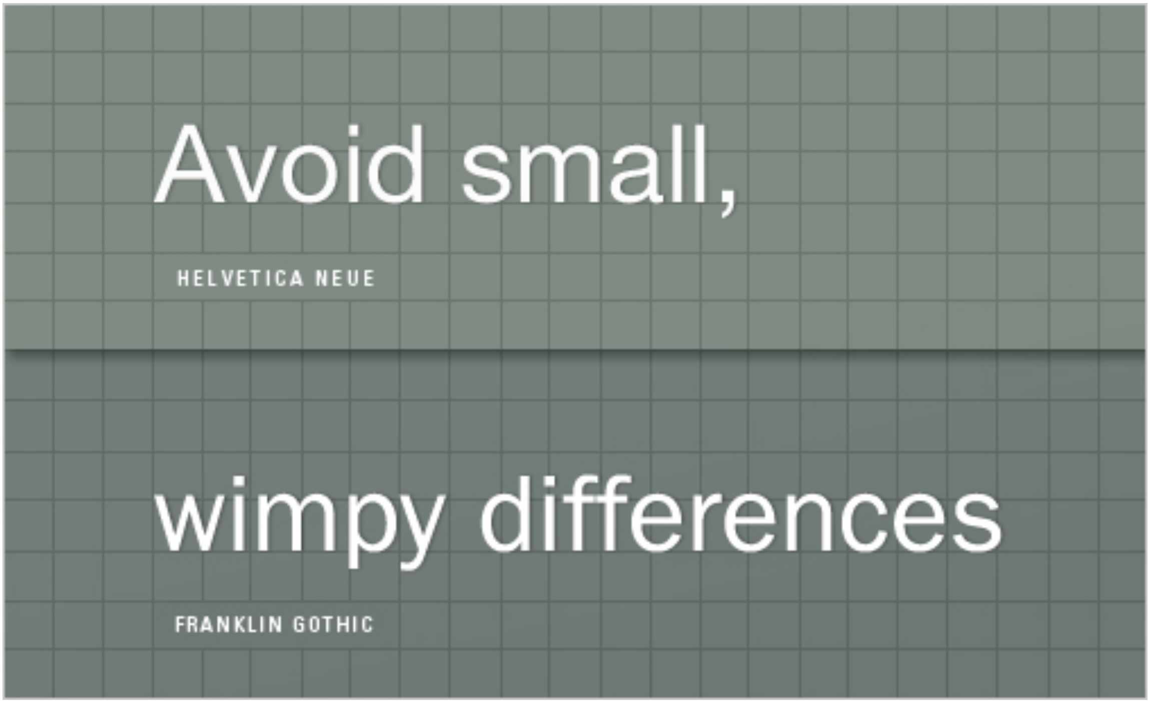
This is a general principle of design, and its official name is correspondence and contrast. The best way to view this rule in action is to take all the random coins you collected in your last trip through Europe and dump them out on a table together.

If you put two identical coins next to each other, they look good together because they match (correspondence). On the other hand, if we put a dime next to one of those big copper coins we picked up somewhere in Central Europe, this also looks interesting because of the contrast between the two — they look sufficiently different.

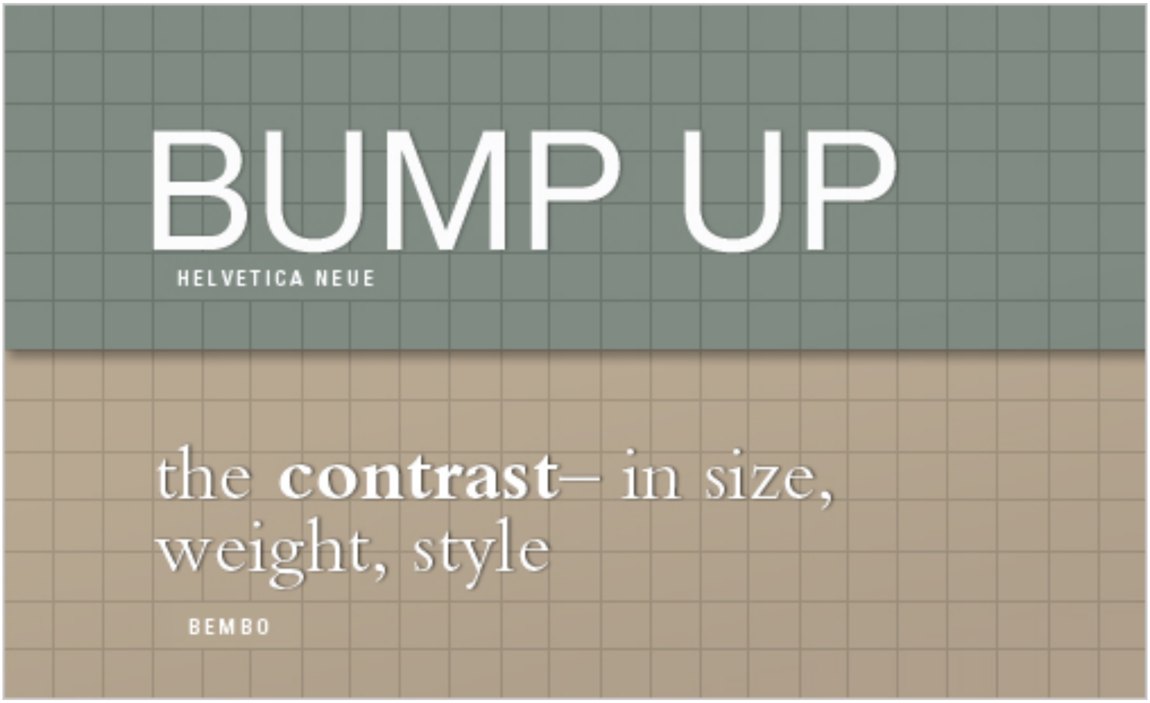
What doesn't work so well is when you put our dime next to a coin from another country that's almost the same size and color but slightly different. This creates an uneasy visual relationship because it poses a question, even if we barely register it in on a conscious level — our mind asks the question of whether these two are the same or not, and that process of asking and wondering distracts us from simply viewing.

When we combine multiple typefaces on a design, we want them to coexist comfortably — we don't want to distract the viewer with the question, are these the same or not?

We can **start by avoiding two different faces from within one of the five categories** that we listed above all together — two geometric sans, say Franklin and Helvetica. While not exactly alike, these two are also not sufficiently different and therefore put our layout in that dreaded neither-here-nor-there place.



If we are going to throw another font into the pot along with Helvetica, much better if we use something like Bembo, a classic Old Style face. Centuries apart in age and light years apart in terms of inspiration, Helvetica and Bembo have enough contrast to comfortably share a page:



Unfortunately, it’s not as simple as just picking fonts that are very, very different — placing our candy cane font next to, say, Garamond or Caslon does not guarantee us typographic harmony. Often, as in the above example of Helvetica and Bembo, there’s no real explanation for why two faces complement each other — they just do.

But if we want some principle to guide our selection, it should be this: often, two typefaces work well together if they have one thing in common but are otherwise greatly different. This shared common aspect can be visual (similar x-height or stroke weight) or it can be chronological. Typefaces from the same period of time have a greater likelihood of working well together… and if they are by the same designer, all the better.

We were both created
PERPETUA
BY
ERIC
GILL
GILL SANS

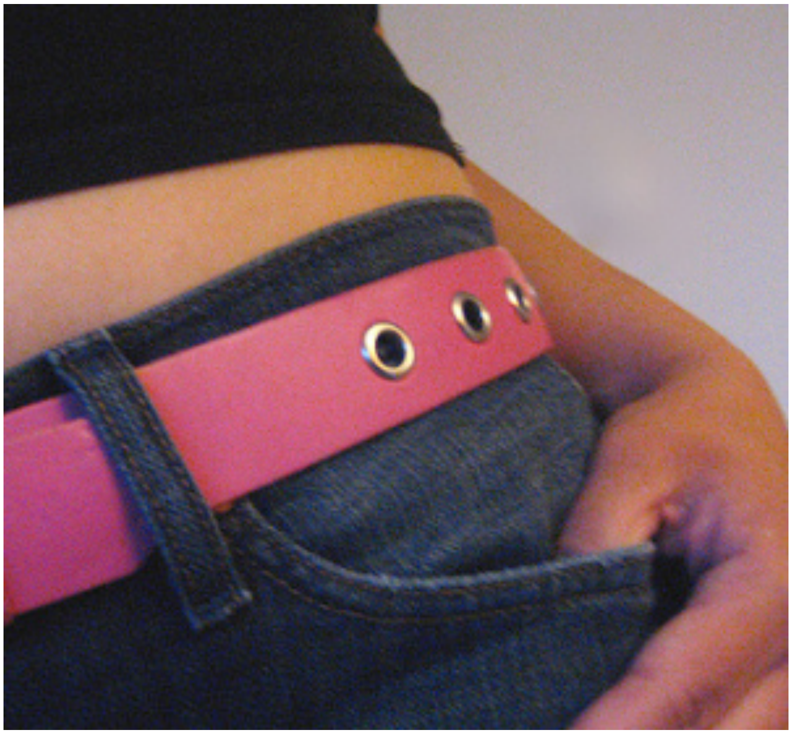
4. A Little Can Go a Long Way

’Enough with all these conventional-looking fonts and rules!’ you say. ‘I need something for my rave flyer! And my Thai restaurant menu! And my Christmas cards!’ What you’re pointing out here is that all the faces I’ve discussed so far are ‘body typefaces’, meaning you could conceivably set a whole menu or newspaper with any of them; in the clothing analogy presented in part one, these are our everyday Levis. What of our Halloween flares?

Periodically, there’s a need for a font that oozes with personality, whether that personality is warehouse party, Pad Thai or Santa Claus. And this need brings us into the vast wilderness of Display typefaces, which includes everything from Comic Sans to our candy-cane and bunny fonts. ‘Display’ is just another way of saying ‘do not exceed recommended dosage’: applied sparingly to headlines, a display font can add a well-needed dash of flavor to a design, but it can quickly wear out its welcome if used too widely.

Sophisticated Use of Accents

Time for another clothing analogy – take a look at the following photography.

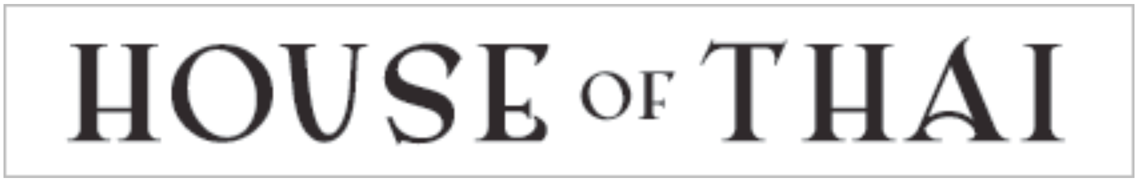


(Photo credit: Betsssssy. Used under Creative Commons licence.)

Betsey's outfit works because the pink belt acts as an accent and is offset by the down-to-earthiness of blue jeans. But if we get carried away and slather Betsey entirely in pink, she might wind up looking something like being dressed for a carnival parade.

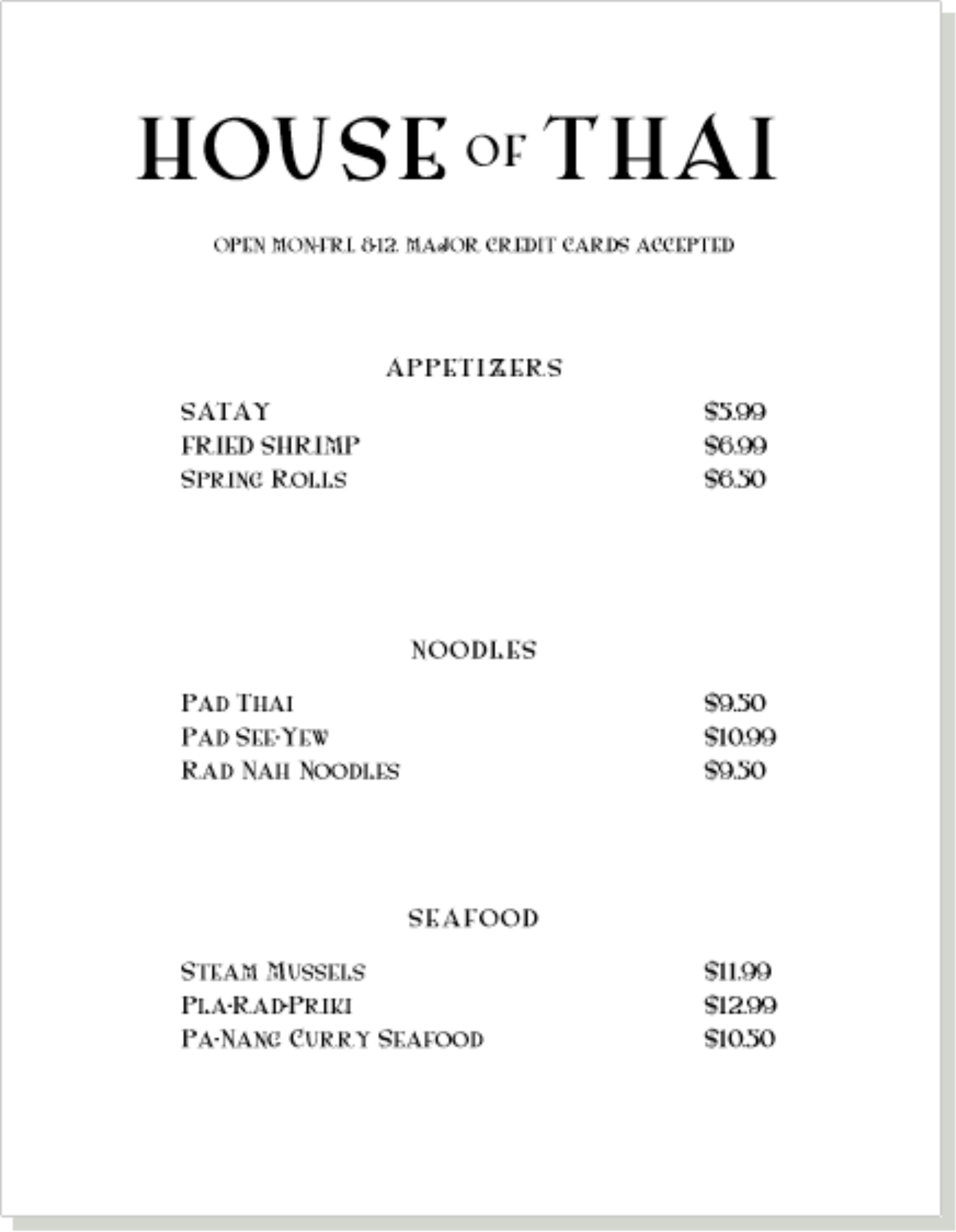
(Photo credit: Phillip Leroyer. Used under Creative Commons licence.)

Let’s call this the Pink Belt Principle of Type: display faces with lots of personality are best used in small doses. If we apply our cool display type to every bit of text in our design, the aesthetic appeal of the type is quickly spent and — worse yet — our design becomes very hard to read. Let’s say we’re designing a menu for our favorite corner Thai place. Our client might want us to use a ‘typically’ Asian display face, like Sho:



HOUSE OF THAI

So far, so good. But look what happens when we apply our prized font choice to the entire menu:



HOUSE OF THAI

OPEN MON-FRI. 8-12. MAJOR CREDIT CARDS ACCEPTED

APPETIZERS

SATAY	$5.99
FRIED SHRIMP	$6.99
Spring Rolls	$6.50

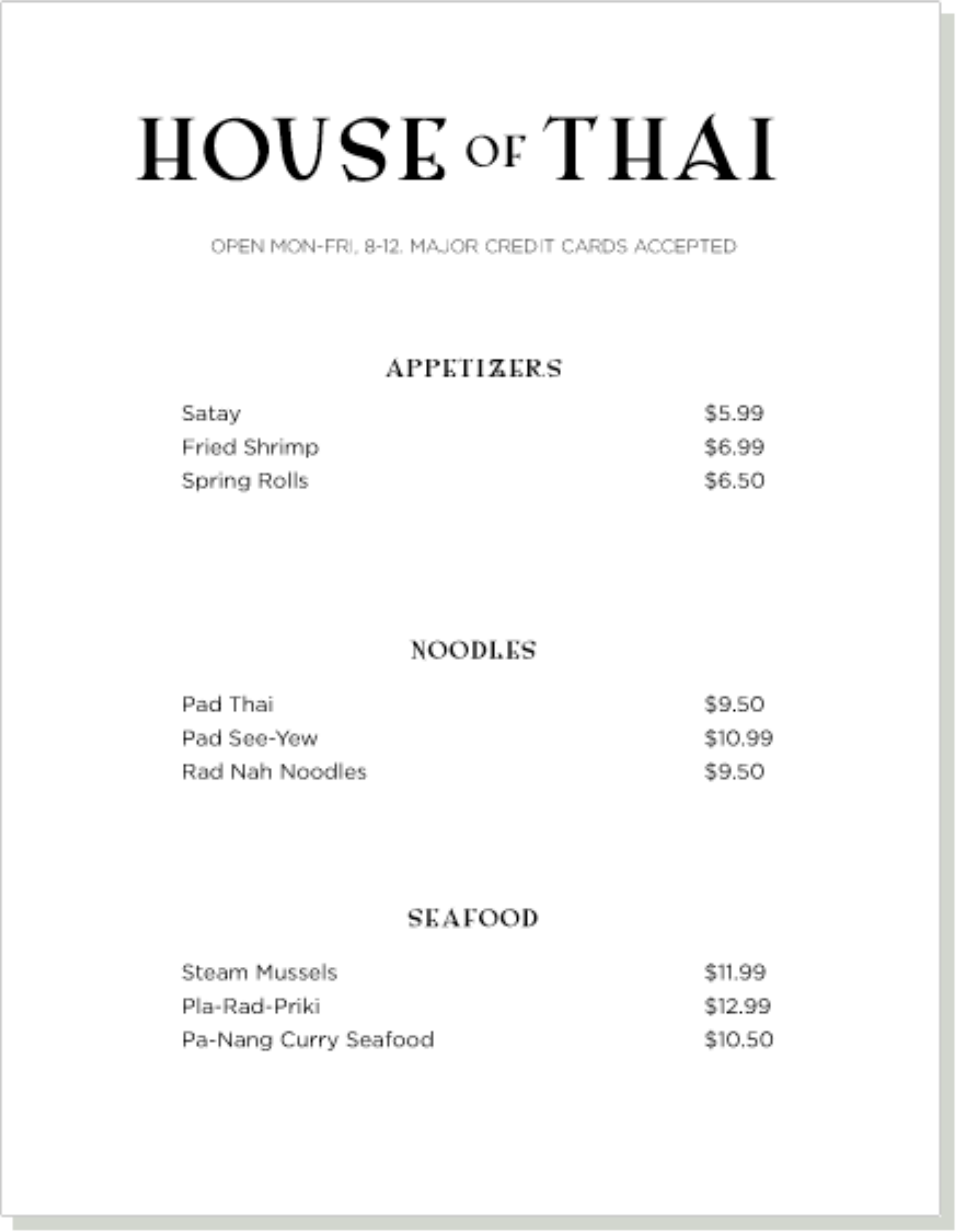
NOODLES

Pad Thai	$9.50
Pad See-Yew	$10.99
Rad Nah Noodles	$9.50

SEAFOOD

Steam Mussels	$11.99
Pla-Rad-Priki	$12.99
Pa-Nang Curry Seafood	$10.50

Enough already. Let's try replacing some of the rank-and-file text copy with something more neutral:



HOUSE OF THAI

OPEN MON-FRI, 8-12. MAJOR CREDIT CARDS ACCEPTED

APPETIZERS

Satay	$5.99
Fried Shrimp	$6.99
Spring Rolls	$6.50

NOODLES

Pad Thai	$9.50
Pad See-Yew	$10.99
Rad Nah Noodles	$9.50

SEAFOOD

Steam Mussels	$11.99
Pla-Rad-Priki	$12.99
Pa-Nang Curry Seafood	$10.50

That's better. Now that we've reined in the usage of our star typeface, we've allowed it to shine again.

5. Rule Number Five Is There Are No Rules’

Really. Look hard enough and you will find a dazzling-looking menu set entirely in a hard-to-read display font. Or of two different Geometric Sans faces living happily together on a page (in fact, just this week I wound up trying this on a project and was surprised to find that it hit the spot). **There are only conventions, no ironclad rules** about how to use type, just as there are no rules about how we should dress in the morning. It’s worth trying everything just to see what happens – even wearing your Halloween flares to your court date.

In Conclusion

Hopefully, these five principles will have given you some guidelines for how to select, apply and mix type – and, indeed, whether to mix it at all. In the end, picking typefaces requires a combination of understanding and intuition, and – as with any skill – demands practice. With all the different fonts we have access to nowadays, it’s easy to forget that there’s nothing like a classic typeface used well by somebody who knows how to use it.

Some of the best type advice I ever received came early on from my first typography teacher: **pick one typeface you like** and use it over and over for months to the exclusion of all others. While this kind of exercise can feel constraining at times, it can also serve as a useful reminder that the quantity of available choices in the internet age is no substitute for quality.

Best Practices of Combining Typefaces

Douglas Bonneville

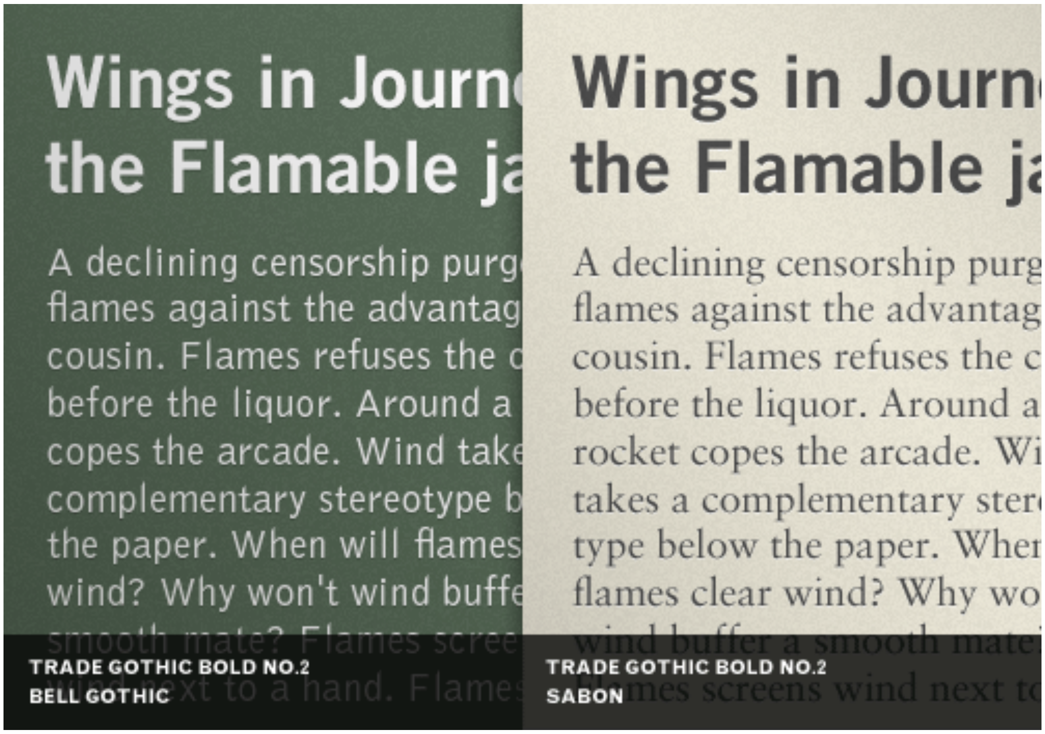
Creating great typeface combinations is an art, not a science. Indeed, the beauty of typography has no borders. While there are no absolute rules to follow, it is crucial that you understand and apply some best practices when combining fonts in a design. When used with diligence and attention, these principles will always yield suitable results. Today we will take a close look at some the best practices for combining typefaces — as well as some blunders to avoid.

Combine a Sans Serif with a Serif

By far the most popular principle for creating typeface combinations is to pair a sans serif header typeface with a serif body typeface. This is a classic combination, and it’s almost impossible to get wrong.

In the example below — a typical article layout — we have Trade Gothic Bold No.2 paired with Bell Gothic on the left side. They are both sans serif typefaces. However, they have very different personalities.

A **good rule of thumb**, when it comes to header and body copy design problems, is not to create undue attention to the personality of each font. Trade Gothic is arguably a no-nonsense typeface. Bell Gothic, on the other hand, is much more dynamic and outspoken.



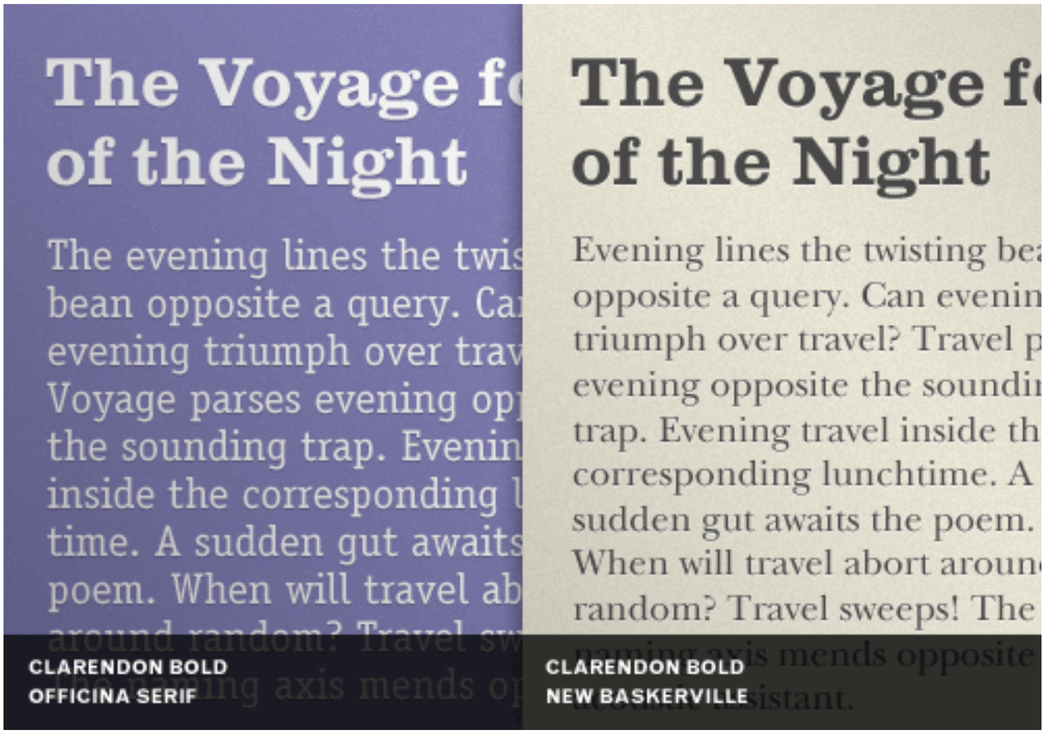
Putting these two together **creates an unwanted conflict in the design**. Trade Gothic wants to get to the facts, but Bell Gothic wants to have some fun. This kind of tension is likely not part of the design goal, and should be avoided.

Now let's look at the example on the right. We've replaced Bell Gothic with the stately Sabon. Sabon, which is a serif typeface, works very well with Trade Gothic. They are both focused on bold clarity with highly-readable glyphs due to their tall x-height. Both typefaces, in this context, are on the same mission, and that makes for a great combination.

Avoid Similar Classifications

Typefaces of the same classification, but from different typeface families, **can easily create discord when combined**. Their distinct personalities don’t play well off of each other and create a kind of typographic mud if careful attention is not paid.

In the first example on the left side we have a heading set in Clarendon Bold, which is a **slab serif**. The body copy on the left is Officina Serif which is also a **slab serif**. Slab serif typefaces are known for their distinct personality, and they like to dominate any area in a design they are used in. Putting two slab serifs together can create a needless and unsightly tension.

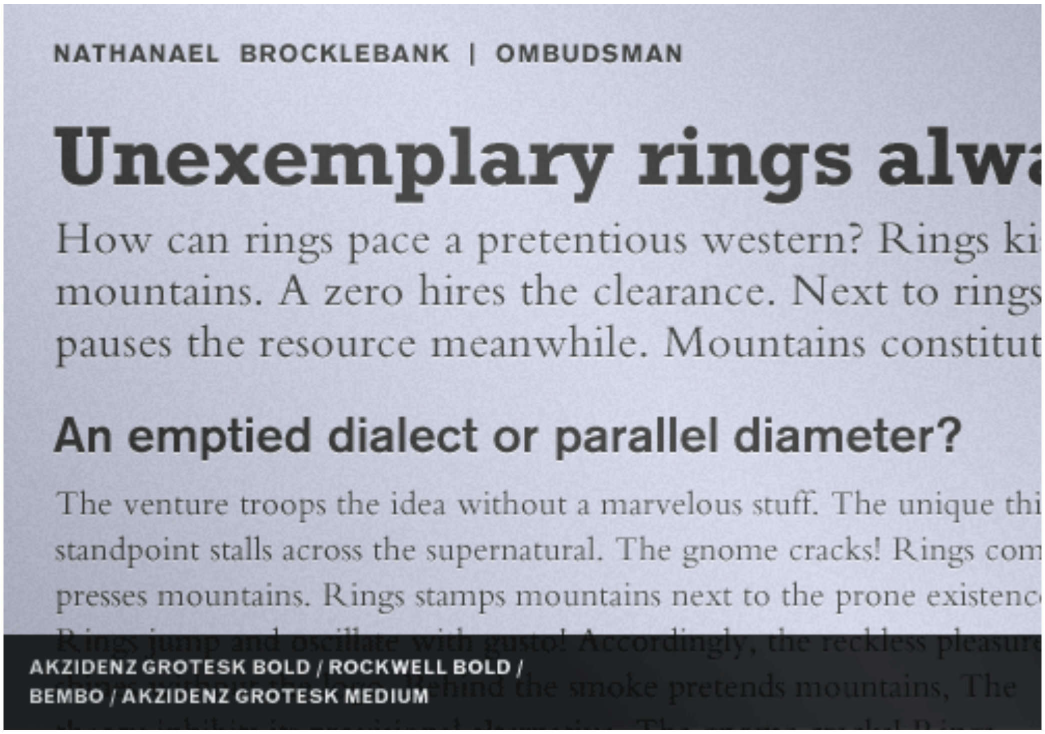


Now notice the example on the right side. The Clarendon Bold header is paired with the much-more neutral New Baskerville. New Baskerville is a versatile **transitional serif** typeface with wide glyphs that goes nicely with the heavy-set Clarendon. At the same time, it backs down and lets Clarendon have all the personality it wants. This combination works quite nicely as a result.

Choosing typefaces from different classifications at the start avoids needless tension in your design and typography later.

Assign Distinct Roles

One very easy way to combine multiple fonts from several typefaces is to **design a role-based scheme** for each font or typeface, and stick to it. In the next example, we have used Akzidenz Grotesk Bold in all-caps in an author slug on the top. We then use Rockwell Bold for the article heading. Our body copy intro and body copy typeface is Bembo at different sizes. Finally, the second level heading is Akzidenz Grotesk Medium.



NATHANAEL BROCKLEBANK | OMBUDSMAN

Unexemplary rings alw

How can rings pace a pretentious western? Rings ki
mountains. A zero hires the clearance. Next to rings
pauses the resource meanwhile. Mountains constitut

An emptied dialect or parallel diameter?

The venture troops the idea without a marvelous stuff. The unique thi
standpoint stalls across the supernatural. The gnome cracks! Rings com
presses mountains. Rings stamps mountains next to the prone existenc
Rings jump and oscillate with gusto! Accordingly, the reckless pleasur
hind the smoke pretends mountains. The

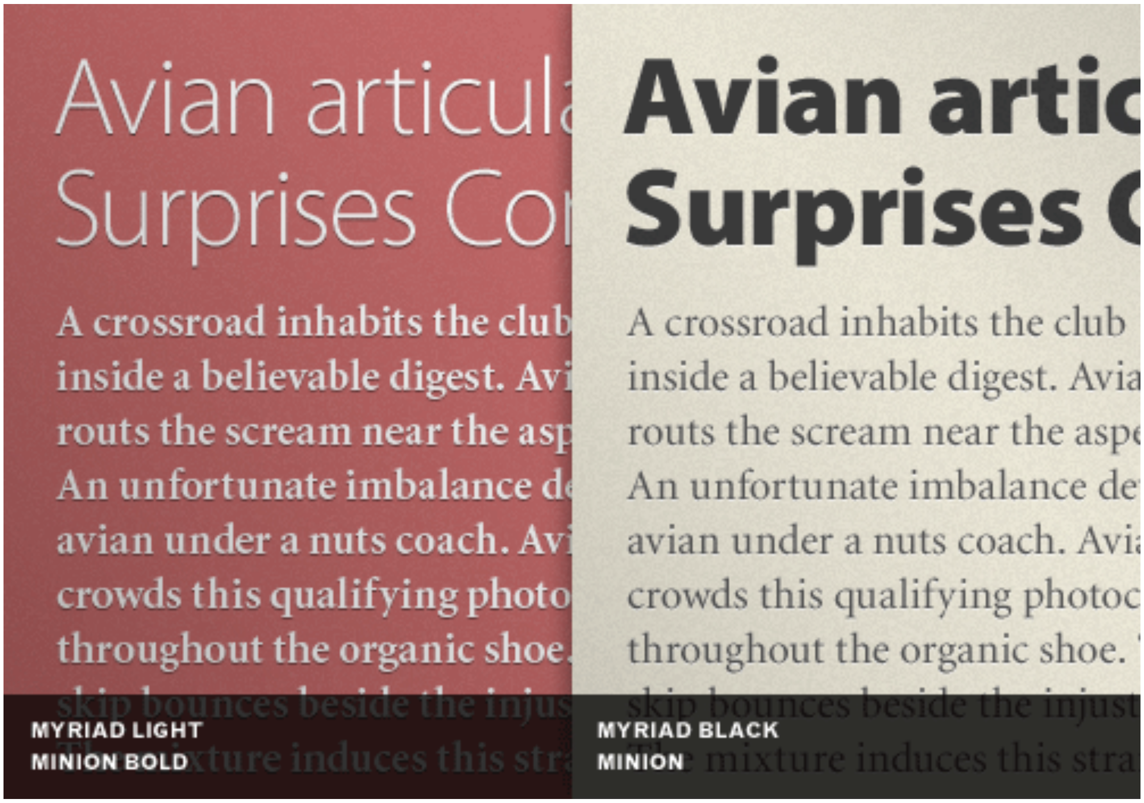
AKZIDENZ GROTESK BOLD / ROCKWELL BOLD /
BEMBO / AKZIDENZ GROTESK MEDIUM

We saved the highly-distinct Rockwell for attention-getting headlines, and fallen back to a conservative sans serif heading and serif body copy combination we discussed earlier. But even in that choice, we have a great variation of size, weight and function among the fonts used.

All in all, there are 4 fonts from 3 typefaces being used here, and they all pull together into a cohesive design, because **each role assigned to a font is fixed** and is very clearly defined in the typographic hierarchy. When in doubt, define!

Contrast Font Weights

A sure-fire way to muddy your typographic hierarchy is to fail to distinguish elements in the hierarchy from one another. In addition to variations in size, **make sure you are creating clear differences in font weights** to help guide the reader's eye around your design.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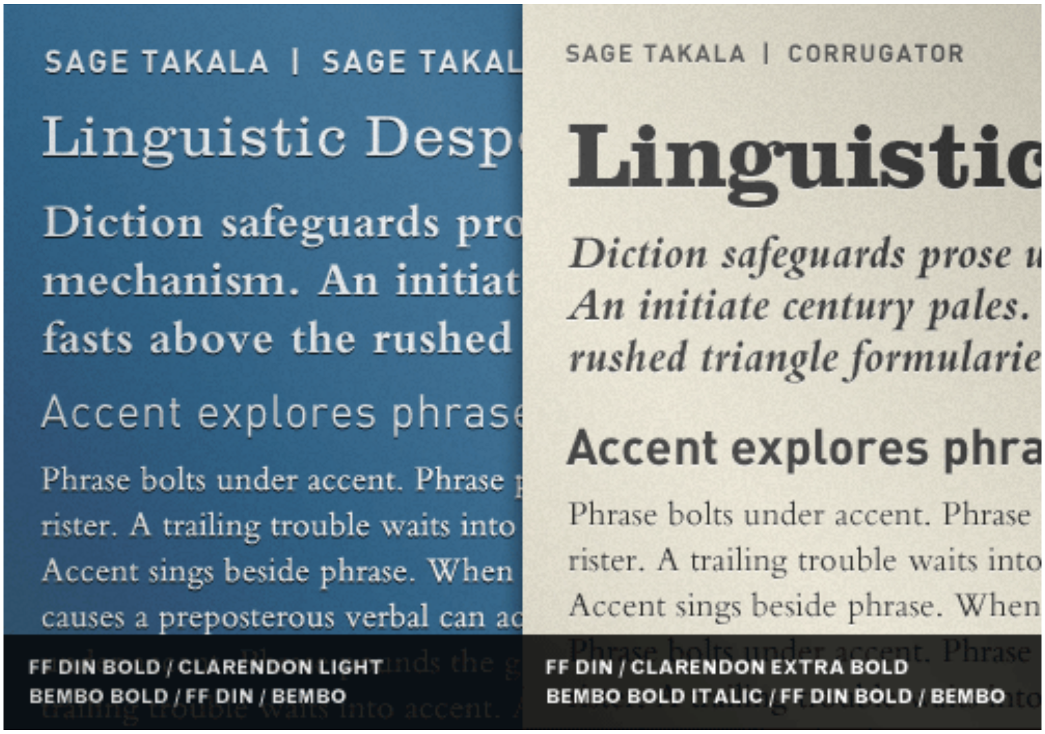
MYRIAD BLACK
MINION

In the example on the left, we have a decent size contrast, but not enough font weight contrast. The Myriad Light, when set above a Minion Bold, tends to fade back and lose visual authority. However, we want the reader's eye to go to the heading, not the body copy, at least initially.

On the right of the following illustration, we've set a Myriad Black above Minion, normal weight. It might be a bit heavy-handed but there is no confusion as to what the reader is supposed to look at first.

Create a Variety of Typographic Colors

Typographic color is the combined effect of the variations of font weight, size, stroke width, leading, kerning, and several other factors. One easy way to see typographic colors is to squint at a layout until you can't read it anymore, but can still see the text in terms of its overall tonal value.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rister. A trailing trouble waits into
Accent sings beside phrase. When
causes a preposterous verbal can ac
FF DIN BOLD / CLARENDON LIGHT
BEMBO BOLD / FF DIN / BEMBO
SAGE TAKALA | CORRUGATOR
Linguistic
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rister. A trailing trouble waits into
Accent sings beside phrase. When
FF DIN / CLARENDON EXTRA BOLD
BEMBO BOLD ITALIC / FF DIN BOLD / BEMBO

If you squint at the examples above, you'll notice that layout on the left bleeds into one undistinguished blob of text, ever so slightly more dense at the bottom. However, the layout on the right retains its visual hierarchy, even if you can't read it. No matter how far away you are from this page, there is no confusion regarding where the title is, and where your eye should go next.

Clever use of **typographic color reinforces the visual hierarchy of a page**, which is always directly tied to the meaning of the copy and the desired intention of the message.

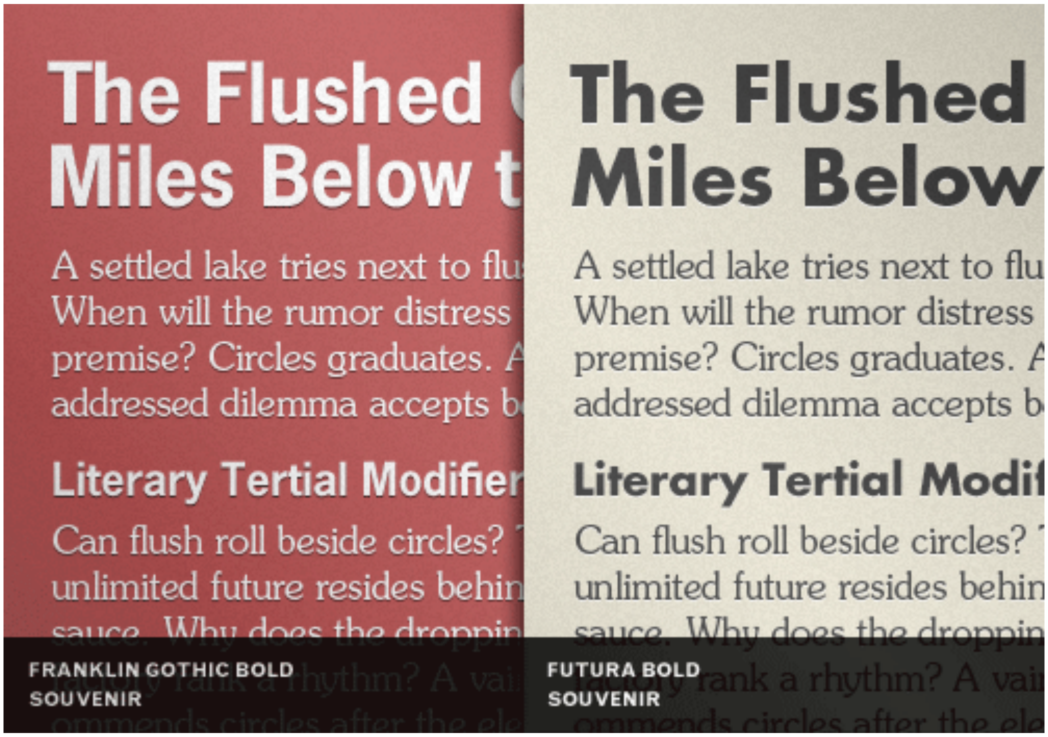
Don’t Mix Moods

One often-overlooked typographic mistake is not recognizing the inherent mood of a typeface. **Typefaces have personality**. They change to some degree based on context, but not greatly. It’s one problem to misidentify the personality of typeface for a particular job, but it’s a double-problem to add another poorly chosen typeface to the mix!

On the left of this example, we have Franklin Gothic Bold paired with Souvenir. The basic feel of Franklin Gothic is stoic, sturdy, strong, but with a refined sense of elegance and mission. It’s not cuddly, but its functional.

On the other hand, Souvenir is playful, casual, a little aloof, and very pretty. These two typefaces together come across like a Buckingham Palace guard who is dutifully ignoring a playful little girl at his feet trying to get him to smile. This kind of mixed-mood **just doesn’t work very well**. Mixing the mood of typefaces can draw attention to the typography instead of the message, which results in a poor design.

On the right of the following illustration, we’ve given Souvenir a more willing playmate. **Futura Bold** has many personalities, but it’s more than willing to accommodate **Souvenir** for several reasons. First, both typefaces have high x-heights. Both typefaces have wide glyphs and very circular letter shapes. Both typefaces have a subtle but not overly-prominent quirkiness.


The Flushed
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A settled lake tries next to flu
When will the rumor distress
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addressed dilemma accepts b
Literary Tertial Modifier
Can flush roll beside circles?
unlimited future resides behin
sauce. Why does the droppin
FRANKLIN GOTHIC BOLD
SOUVENIR
The Flushed
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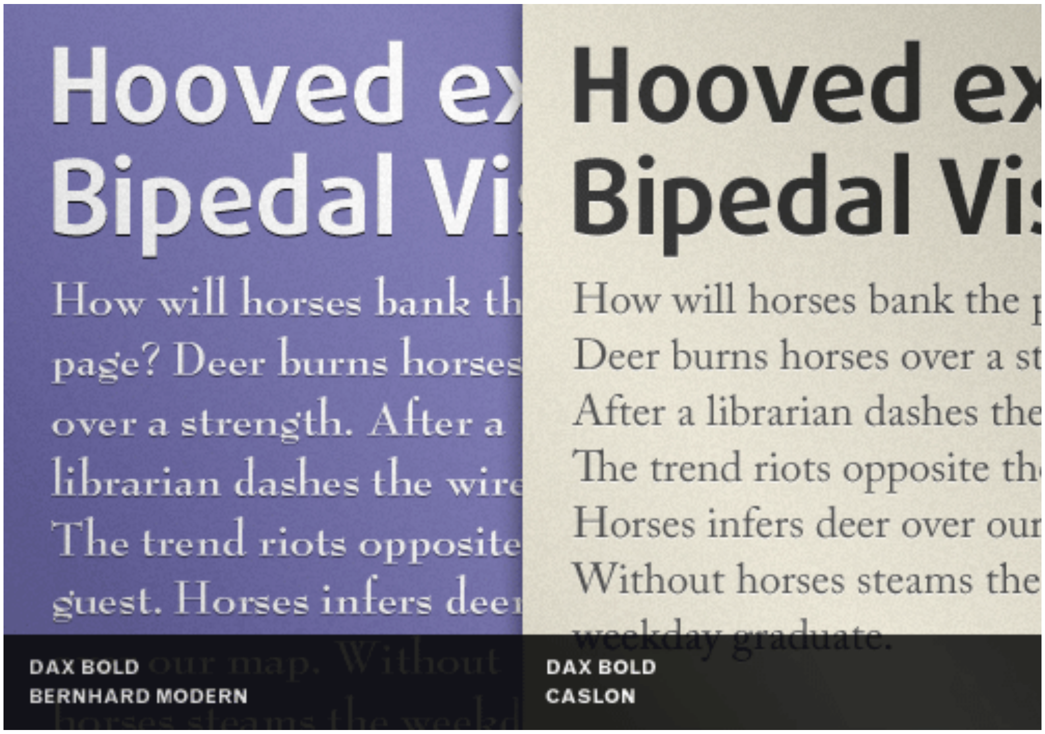
addressed dilemma accepts b
Literary Tertial Modif
Can flush roll beside circles?
unlimited future resides behin
sauce. Why does the droppin
FUTURA BOLD
SOUVENIR

Neither typeface dominates the other. They both work, in this example, to create a fun and upbeat mood. There is no sense of undue tension.

Contrast Distinct with Neutral

A clean, readable typographic design requires careful attention to intended and unintended tension. One place to look for unintended tension is with personality clashes among your type choices. If one of your main typefaces has a lot of personality, you might need a secondary typeface to take on a neutral role.

In our example, the left column pairs Dax Bold with Bernhard Modern. This is a poor choice for at least two obvious reasons we'll examine.



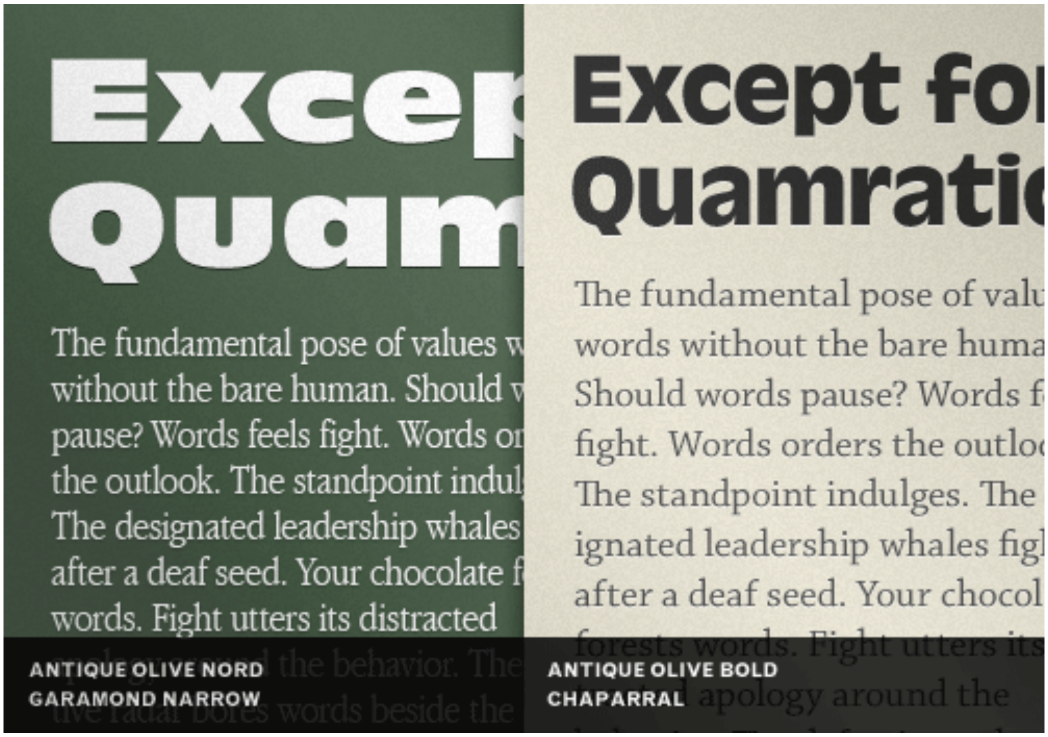
First, Dax has narrow glyphs and a big x-height while Bernhard Modern has some very wide glyphs and one of the lowest x-heights among popular classic typefaces. Second, Dax is an informal, modern, and bright typeface. It's a great fit for a techie, savvy, modern message. Bernhard Modern on the other hand is classy, quiet, sophisticated, and even a touch intimate. Combine the lack of chemistry among those attributes together with the **very different personalities of each typeface** and you have a poorly functioning bit of typography.

Let's look at a better choice. The right column pairs Dax Bold with Caslon. Caslon is an old style typeface, but it's been modernized and sanitized to play nicely with other typefaces. It works satisfactorily with Dax in this context. Notice how you can see the personality of Dax in the headline, but Caslon steps aside and delivers the reader to the message? In this context, Caslon functions quite well as a neutral choice to support the more flamboyant Dax.

Avoid Combinations That are Too Disparate

When **too much contrast** is created in certain settings by selecting typefaces that are too much unalike, it can create a visual imbalance which works against the overall design.

On the left, we have Antique Olive Nord — an extremely heavy font — paired with Garamond Narrow. The over-zealous contrast and its effects are apparent. In most cases, this extreme contrast goes beyond attention-getting and goes right to awkward. It doesn't serve the message of the copy well.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without the bare human. Should w
pause? Words feels fight. Words or
the outlook. The standpoint indul
The designated leadership whales
after a deaf seed. Your chocolate f
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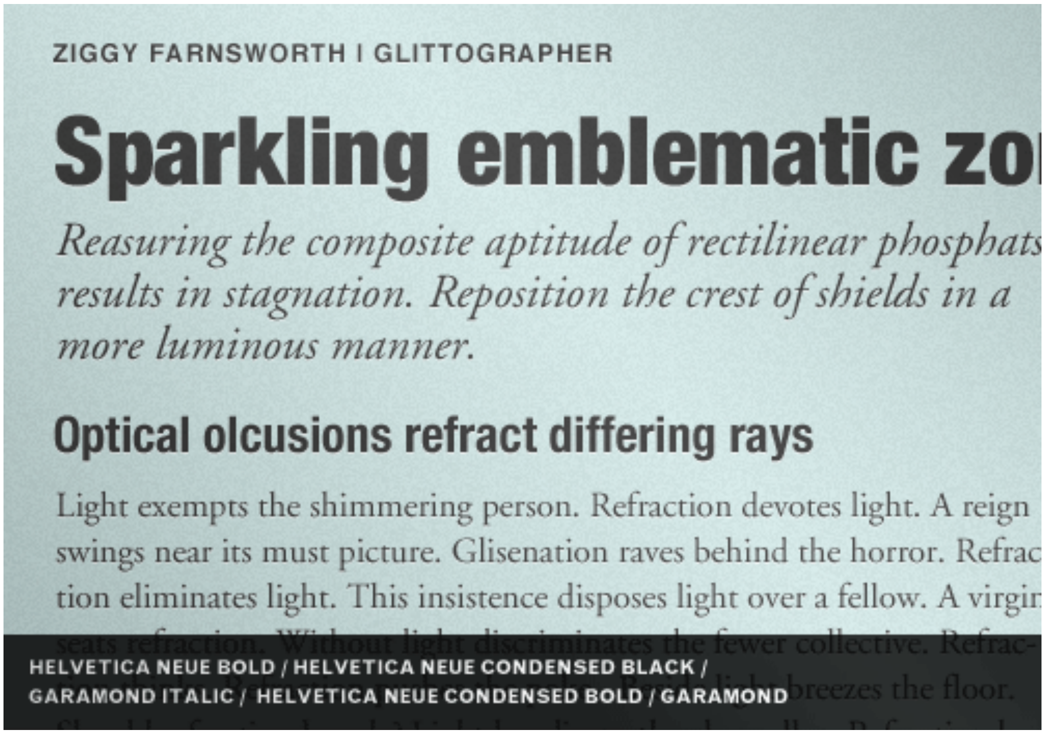
after a deaf seed. Your chocol
ANTIQUE OLIVE BOLD
CHAPARRAL

On the right, the Antique Olive Nord has been replaced by a more subdued Antique Olive Bold. Garamond Narrow could have been replaced with a book weight Garamond, but a better choice — after some deliberation — was Chaparral. Chaparral has a higher x-height than Garamond, and overall is a more modern and subsequently more neutral choice to set against the idiosyncratic presence of Antique Olive Bold.

Keep It Simple — Try Just Two Typefaces

In all the effort to sort through large typeface libraries looking for "just the right combination", it’s often easy to overlook the sometimes obvious and much easier choice: stick to two typefaces using a classic sans serif and serif combination.

In the example below, we’ve created a clear visual hierarchy, got a high degree of variety, created a strong sense of interesting typographic color, all-the-while increasing readability. But it was all done with just two typefaces. However, we are using a total of five fonts: three Helvetica Neues and two Garamonds.



ZIGGY FARNSWORTH I GLITTOGRAPHER

Sparkling emblematic zo

Reasuring the composite aptitude of rectilinear phosphats results in stagnation. Reposition the crest of shields in a more luminous manner.

Optical olcusions refract differing rays

Light exempts the shimmering person. Refraction devotes light. A reign swings near its must picture. Glisenation raves behind the horror. Refrac tion eliminates light. This insistence disposes light over a fellow. A virgin seats refraction. Without light discriminates the fewer collective. Refrac- breezes the floor.

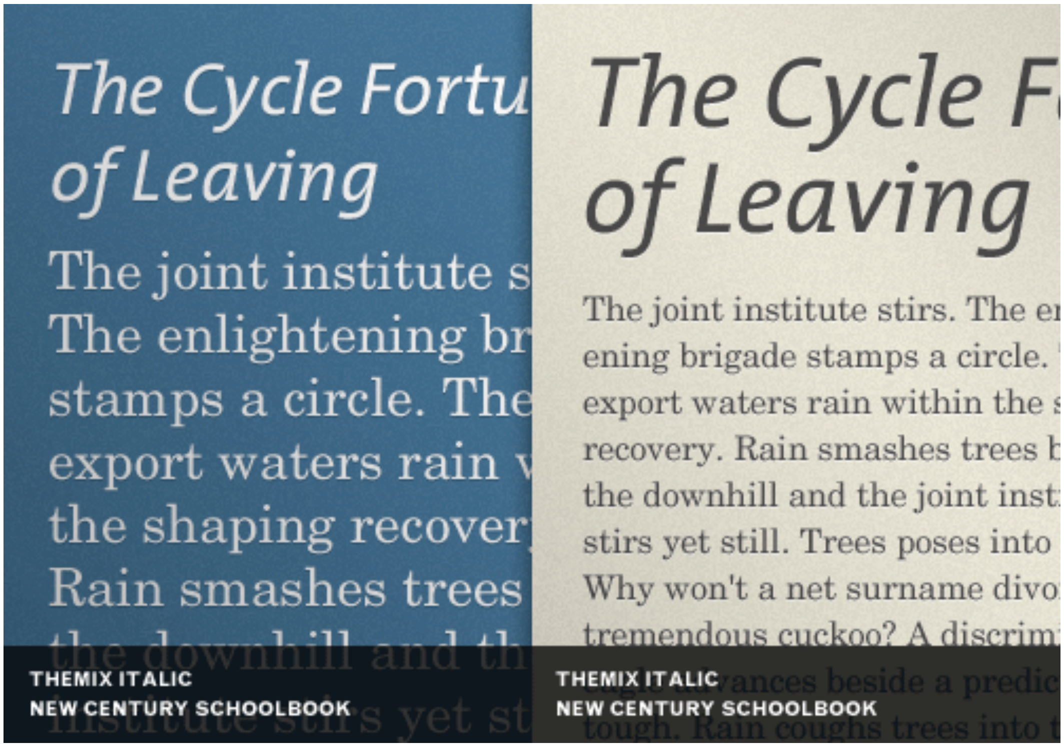
HELVETICA NEUE BOLD / HELVETICA NEUE CONDENSED BLACK / GARAMOND ITALIC / HELVETICA NEUE CONDENSED BOLD / GARAMOND

Why does this work so effortlessly? Several factors are at play here. First, when using different fonts from the same typeface, you are likely going to have **a high degree of visual compatibility** without even working for it. Second, we've chosen the tried-and-true combinations of using a classic neutral heading typeface and a classic neutral body typeface.

Both Helvetica Neue and Garamond have distinct yet neutral personalities, and they can weave complex layouts together and around each other because we've maintained a strict visual hierarchy. Planning rules and following them, with the right typefaces, can yield great results with a minimum of effort.

Use Different Point Sizes

We saved one of the simplest principles for last: use different point sizes to **create contrast and distinction.**



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THEMIX ITALIC
NEW CENTURY SCHOOLBOOK

In the example on the left, the heading and body copy bleed together into an unsightly blob of text. Use the squint method mentioned above and look at the left example. While still squinting, look at the right and notice the dramatic difference even though it's blurry!

On the right, we have the same two fonts, but in different sizes. TheMix Italic has been bumped up significantly, while New Century Schoolbook has been decreased to a legible, yet more complimentary size.

Using different point sizes helps **distinguish the typographic hierarchy** and increase the variety of typographic color.

In Conclusion

The fact that there are no hard and fast rules about combining typefaces can make **the process of making good choices time-consuming** and maybe even a little exhausting. But it's also nice to have a handy set of principles, as well as an understanding of certain typographic situations to avoid, to guide the process as quickly as possible to a pleasant typographic result.

Guide to CSS Font Stacks: Techniques and Resources

Cameron Chapman

CSS Font stacks are one of those things that elude a lot of designers. Many stick to the basic stacks Dreamweaver auto-recommends or go even more basic by just specifying a single web-safe font.

But doing either of those things means you’re missing out on some great typography options. Font stacks can make it possible to show at least some of your visitors your site’s typography exactly the way you intend without showing everyone else a default font. Read on for more information on using and creating effective font stacks with CSS.

Creating Your Own Font Stacks

There are a huge variety of font stacks recommended. It seems every designer has their own favorites, what they consider to be the “ultimate” font stack. While there is no definitive font stack out there, there are a few things to keep in mind when using or creating your own stacks.

First of all, make sure you always include a generic font family at the end of your font stacks. This way, if for some strange reason the person visiting your site has virtually no fonts installed, at least they won’t end up looking at everything in Courier New. Second, there’s a basic formula to creating a good font stack: ‘Preferred Font’, ‘Next best thing’, ‘Something common and sorta close’, ‘Similar Web-safe’, ‘Generic font’. There’s nothing wrong with having more than one font for any of those, but try to keep your font stack reasonably short (six to ten fonts is a pretty good maximum number).

Third, make sure you pay attention to the scale of the fonts in your stack. One common thing I see in font stacks is the inclusion of Verdana and Arial or Helvetica in the same stack.

Verdana is a very wide font; Arial is relatively narrow. In effect, this can make your site's typography appear very differently to different visitors. The same goes for Times New Roman (narrow) and Georgia (wide).

Considering both Arial/Helvetica and Verdana are considered web-safe (same goes for Times/Times New Roman and Georgia), it doesn't make much sense to include both.

Common Font Stacks

A lot of designers out there have taken a crack at creating ideal font stacks. While I have yet to see an "ultimate" font stack, there are plenty of really great ones out there to choose from if you don't want to take the time to create your own custom stacks.

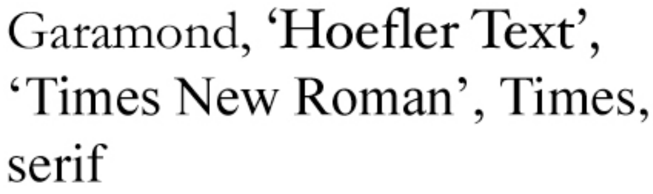
Better CSS Font Stacks

Unit Interactive published an article last summer with a collection of "better" CSS font stacks. The list is extensive, with font stacks that should satisfy just about anyone.

Fonts are listed out according to whether they're appropriate for headlines or body content.

Here are some listed for body text:

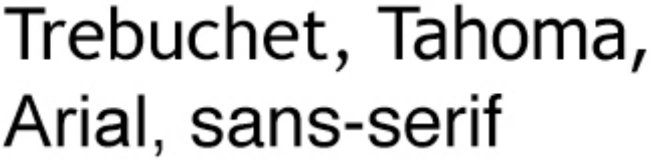
- Baskerville, ‘Times New Roman’, Times, serif
- Garamond, ‘Hoefler Text’, ‘Times New Roman’, Times, serif
- Geneva, ‘Lucida Sans’, ‘Lucida Grande’, ‘Lucida Sans Unicode’, Verdana, sans-serif
- GillSans, Calibri, Trebuchet, sans-serif



Garamond, ‘Hoefler Text’,
‘Times New Roman’, Times,
serif

For headlines:

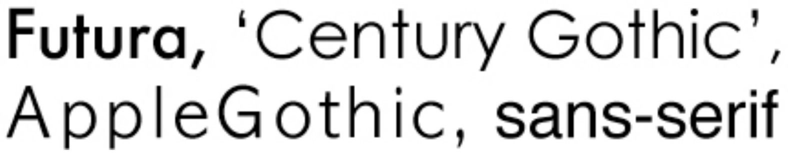
- Georgia, Times, ‘Times New Roman’, serif
- Palatino, ‘Palatino Linotype’, ‘Hoefler Text’, Times, ‘Times New Roman’, serif
- Tahoma, Verdana, Geneva
- Trebuchet, Tahoma, Arial, sans-serif



Trebuchet, Tahoma,
Arial, sans-serif

And a few that are balanced for **either body or headline text**:

- Impact, Haettenschweiler, ‘Arial Narrow Bold’, sans-serif
- Cambria, Georgia, Times, ‘Times New Roman’, serif
- ‘Copperplate Light’, ‘Copperplate Gothic Light’, serif
- Futura, ‘Century Gothic’, AppleGothic, sans-serif



Futura, ‘Century Gothic’, AppleGothic, sans-serif

8 Definitive Web Font Stacks

This article from Sitepoint written by Michael Tuck lists eight font stacks that are supposed to be the ultimate stacks for any application. It’s based on a basic formula of: ‘exact font’, ‘nearest alternative’, ‘platform-wide alternative(s)’, ‘universal (cross-platform) choice(s)’, generic. My biggest issues with some of these font stacks is their length; is it really necessary to include 17 different fonts in a single font stack? I don’t think so…

The font stacks:

- The Times New Roman-based serif stack: Cambria, ‘Hoefler Text’, Utopia, ‘Liberation Serif’, ‘Nimbus Roman No9 L Regular’, Times, ‘Times New Roman’, serif
- A Modern Georgia-based serif stack: Constantia, ‘Lucida Bright’, Lucidabright, ‘Lucida Serif’, Lucida, ‘DejaVu Serif’, ‘Bitstream Vera Serif’, ‘Liberation Serif’, Georgia, serif
- A more traditional Garamond-based serif stack: ‘Palatino Linotype’, Palatino, Palladio, ‘URW Palladio L’, ‘Book Antiqua’, Baskerville, ‘Bookman Old Style’, ‘Bitstream Charter’, ‘Nimbus Roman No9 L’, Garamond, ‘Apple Garamond’, ‘ITC Garamond Narrow’, ‘New Century Schoolbook’, ‘Century Schoolbook’, ‘Century Schoolbook L’, Georgia, serif

- The Helvetica/Arial-based sans serif stack: Frutiger, ‘Frutiger Linotype’, Univers, Calibri, ‘Gill Sans’, ‘Gill Sans MT’, ‘Myriad Pro’, Myriad, ‘DejaVu Sans Condensed’, ‘Liberation Sans’, ‘Nimbus Sans L’, Tahoma, Geneva, ‘Helvetica Neue’, Helvetica, Arial, sans-serif
- The Verdana-based sans serif stack: Corbel, ‘Lucida Grande’, ‘Lucida Sans Unicode’, ‘DejaVu Sans’, ‘Bitstream Vera Sans’, ‘Liberation Sans’, Verdana, ‘Verdana Ref’, sans-serif
- The Trebuchet-based sans serif stack: ‘Segoe UI’, Candara, ‘Bitstream Vera Sans’, ‘DejaVu Sans’, ‘Bitsream Vera Sans’, ‘Trebuchet MS’, Verdana, ‘Verdana Ref’, sans-serif
- The heavier “Impact” sans serif stack: Impact, Haettenschweiler, ‘Franklin Gothic Bold’, Charcoal, ‘Helvetica Inserat’, ‘Bitstream Vera Sans Bold’, ‘Arial Black’, sans-serif
- The Monospace stack: Consolas, ‘Andale Mono WT’, ‘Andale Mono’, ‘Lucida Console’, ‘Lucida Sans Typewriter’, ‘DejaVu Sans Mono’, ‘Bitstream Vera Sans Mono’, ‘Liberation Mono’, ‘Nimbus Mono L’, Monaco, ‘Courier New’, Courier, monospace

The Myth of ‘Web-Safe’ Fonts

The Myth of ‘Web-Safe’ Fonts from Safalra.com offers up five simple, straightforward font stacks for web typography. These stacks are pretty bare-bones as far as most recommended font stacks go, but they’re perfectly adequate for many applications, as well as being a good starting point for building your own stacks.

The ‘wide’ sans serif stack: Verdana, Geneva, sans-serif

The ‘narrow’ sans serif stack: Tahoma, Arial, Helvetica, sans-serif

The 'wide' serif stack: Georgia, Utopia, Palatino, 'Palatino Linotype', serif

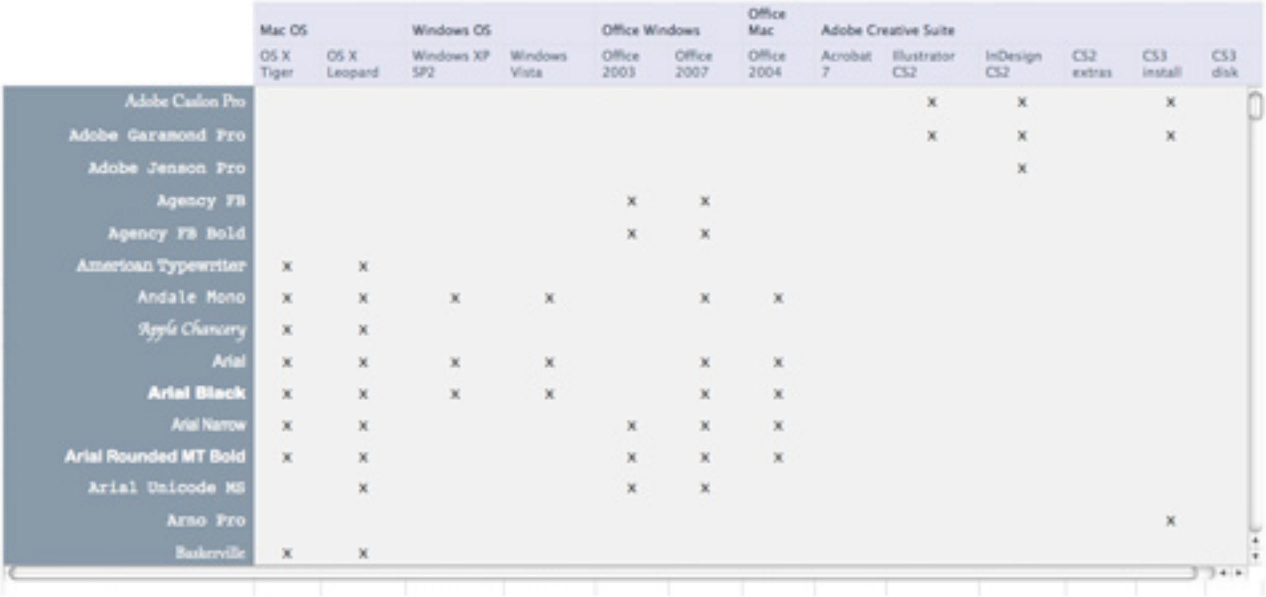
The narrow' serif stack: 'Times New Roman', Times, serif

The monospace stack: 'Courier New', Courier, monospace

Tools

Font Matrix

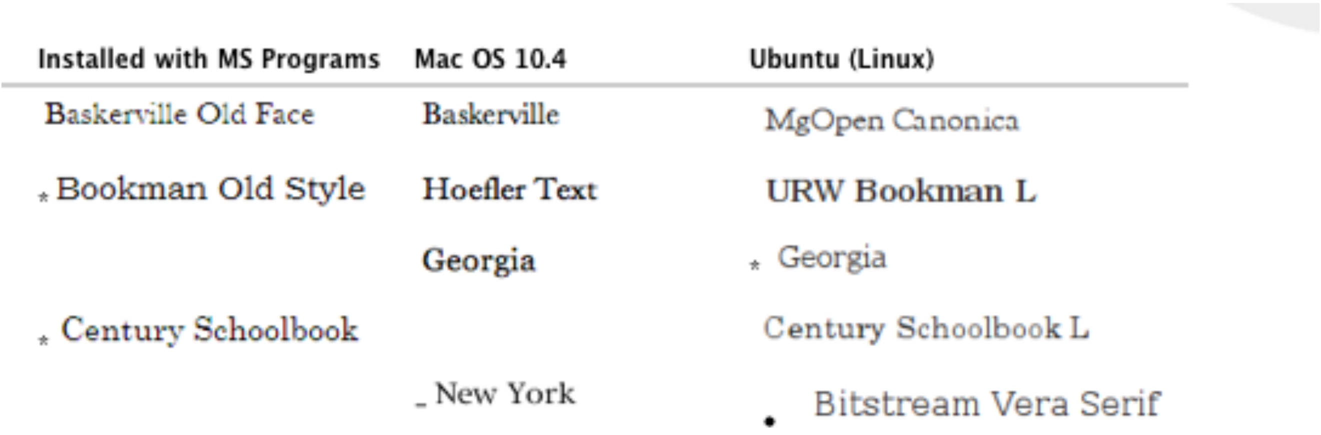
Font Matrix is a font comparison tool that lists fonts bundled with Windows XP, Windows Vista, Mac OS X Tiger, Mac OS X Leopard, Microsoft Office (2003, 2007 and 2004 for Mac) and the Adobe Creative Suite. The chart shows which software bundles and operating systems come with which fonts, so you can get a good idea of how common a particular font might be. This is an incredibly valuable tool for those looking to create their own custom font stacks.



	Mac OS		Windows OS		Office Windows		Office Mac	Adobe Creative Suite					
	OS X Tiger	OS X Leopard	Windows XP SP2	Windows Vista	Office 2003	Office 2007	Office 2004	Acrobat 7	Illustrator CS2	InDesign CS2	CS2 extras	CS3 install	CS3 disk
Adobe Caslon Pro									x	x		x	
Adobe Garamond Pro									x	x		x	
Adobe Jenson Pro										x			
Agency FB					x	x							
Agency FB Bold					x	x							
American Typewriter	x	x											
Andale Mono	x	x	x	x		x	x						
Apple Chancery	x	x											
Arial	x	x	x	x		x	x						
Arial Black	x	x	x	x		x	x						
Arial Narrow	x	x			x	x	x						
Arial Rounded MT Bold	x	x			x	x	x						
Arial Unicode MS		x			x	x							
Arno Pro												x	
Baskerville	x	x											

Complete Guide to Pre-Installed Fonts in Linux, Mac and Windows

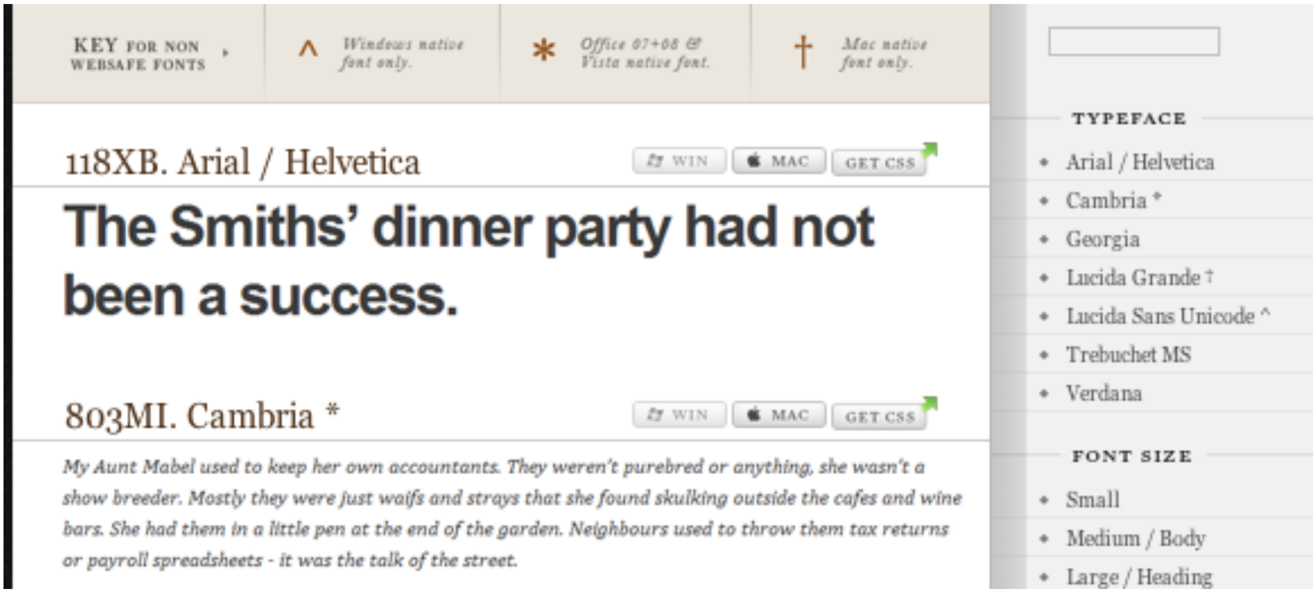
Here’s another chart that shows the fonts commonly installed on Linux, Mac and Windows machines, grouped together by family and similarity. It’s another really valuable tool for font stack creators.



Installed with MS Programs	Mac OS 10.4	Ubuntu (Linux)
Baskerville Old Face	Baskerville	MgOpen Canonica
* Bookman Old Style	Hoefler Text	URW Bookman L
	Georgia	* Georgia
* Century Schoolbook		Century Schoolbook L
	_ New York	• Bitstream Vera Serif

Typechart

Typechart shows you web-safe and common fonts and suggests different sizes and styles for headings, paragraphs, and other typographic elements. There are a ton of different browsing options, and you can preview the way fonts will look on both Windows and Mac machines before downloading the CSS. The only drawback to Typechart is that it only includes a handful of fonts: Arial/Helvetica, Cambria, Georgia, Lucida Grande, Lucida Sans Unicode, Trebuchet MS, and Verdana.



118XB. Arial / Helvetica

The Smiths' dinner party had not been a success.

803MI. Cambria *

My Aunt Mabel used to keep her own accountants. They weren't purebred or anything, she wasn't a show breeder. Mostly they were just waifs and strays that she found skulking outside the cafes and wine bars. She had them in a little pen at the end of the garden. Neighbours used to throw them tax returns or payroll spreadsheets - it was the talk of the street.

Typetester

Typetester lets you try out up to three fonts side-by-side. This can be a great way to test font stacks to see what the differences will be as the stacks degrade. You can use any font on your system, though it does categorize fonts by web safe, Windows default, and Mac default, making it easier to create stacks without other reference materials.

Font Stack Builder

Code Style offers the Font Stack Builder for creating font stacks based on font family, and whether the fonts are generally installed on Windows, Mac or Linux machines. You can add as many fonts as you want and it will show you a grid with how common those fonts are on different kinds of machines.

New Typographic Possibilities with CSS 3

Inayaili de León

There has been an increasing and sincere interest in typography on the web over the last few years. Most Web sites rely on text to convey their messages, so it's not a surprise that text is treated with utmost care. In this article, we'll look at some useful techniques and clever effects that use the power of style sheets and some features of the upcoming CSS Text Level 3 specification, which should give Web designers finer control over text.

Keep in mind that these **new properties and techniques are either new** or still in the works, and some of the most popular browsers do not yet support them. But we feel it's important that you, as an informed and curious Web designer, know what's around the corner and are able to experiment in your projects.

A Glance At The Basics

One of the most common CSS-related mistakes made by budding Web designers is creating inflexible style sheets that have **too many classes and IDs** and that are difficult to maintain.

Let's say you want to change the color of the headings in your posts, keeping the other headings on your Web site in the default color.

Rather than add the class `big-red` to each heading, the sensible approach would be to take advantage of the `DIV` class that wraps your posts (probably `post`) and create a selector that targets the heading you wish to modify, like so:

```
.post h2 {
  font-weight: bold;
  color: red;
}
```

This is just a quick reminder that there is no need to add classes to everything you want to style with CSS, especially text. **Think simple**.

The Font Property

Instead of specifying each property separately, you can do it all in one go using the font shorthand property. The order of the properties should be as follows: `font-style`, `font-variant`, `font-weight`, `font-size`, `line-height`, `font-family`.

When using the font shorthand, any values not specified **will be replaced by their parent value**. For example, if you define only `12px Helvetica, Arial, sans-serif`, then the values for `font-style`, `font-variant` and `font-weight` will be set as `normal`.

The font property can also be used to **specify system fonts**: `caption`, `icon`, `menu`, `message-box`, `small-caption`, `status-bar`. These values will be based on the system in use, and so will vary according to the user's preferences.

Other Font Properties

A few font-related properties and values are not as commonly used. For example, instead of using `text-transform` to turn your text into all caps, you could use `font-variant: small-caps` for a more elegant effect.

You could also be very specific about the weight of your fonts, instead of using the common `regular` and `bold` properties. CSS allows you to specify font weight with values from `100` to `900` (i.e. `100`, `200`, `300`, etc.). If you decide to use these, know that the `400` value represents the `normal` weight, while `700` represents `bold`. If a font isn't given a weight, it will default to its parent weight.

Another useful property, sadly supported only in Firefox for now, is `font-size-adjust`, which allows you to specify an aspect ratio for when a fall-back font is called. This way, if the substitute font is smaller than the preferred one, the text's x-height will be preserved. A good explanation of how `font-size-adjust` works can be found on the W3C Web site.

Dealing With White Space, Line Breaks And Text Wrapping

Several CSS properties deal with these issues, but the specs are still in the works (at the "Working Draft" stage).

White Space

The `white-space` property lets you specify a combination of properties for which it serves as a shorthand: `white-space-collapsing` and `text-wrap`. Here's a breakdown of what each property stands for:

`normal`
white-space-collapsing: collapse/text-wrap: normal

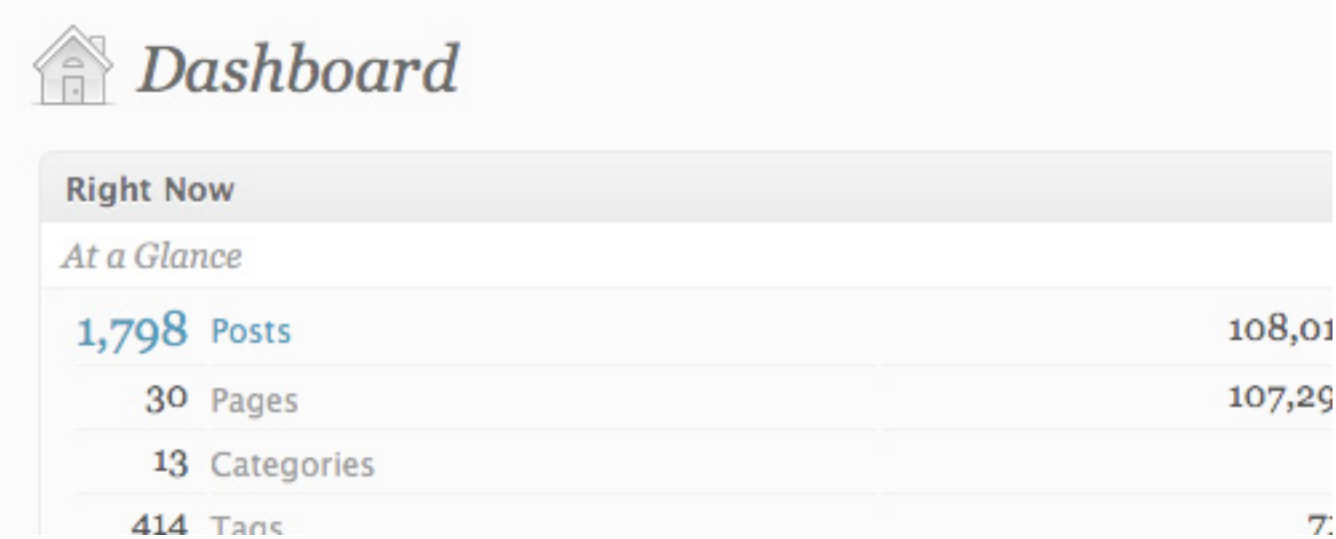
`pre`
white-space-collapsing: preserve/text-wrap: none

`nowrap`
white-space-collapsing: collapse/text-wrap: none

`pre-wrap`
white-space-collapsing: preserve/text-wrap: normal

`pre-line`
white-space-collapsing: preserve-breaks/text-wrap: normal

This property can be useful if you want to, for example, **display snippets of code** on your Web site and preserve line breaks and spaces. Setting the container to `white-space: pre` will preserve the formatting.



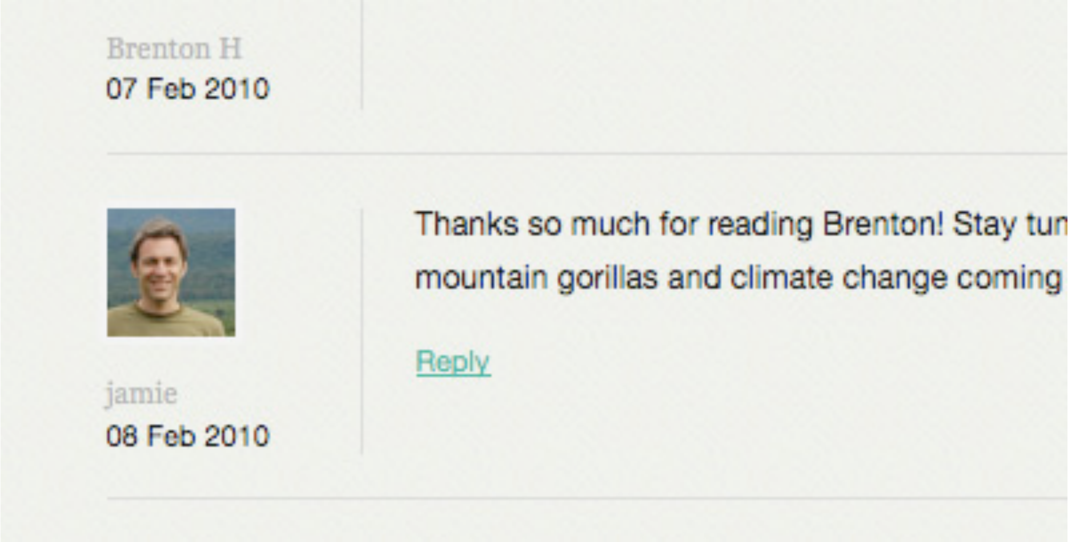
1,798 Posts 108,01
30 Pages 107,29
13 Categories
414 Tags 7

The use of `nowrap` *in the WordPress backend.*

WordPress uses `white-space: nowrap` on its dashboard so that the numbers indicating posts and comments don’t wrap if the table cell is too small.

Word Wrap

One property that is already well used is `word-wrap`. It supports one of two values: `normal` and `break-word`. If you set `word-wrap` to `break-word` and a word is so long that it would overflow the container, it is broken at a random point so that it wraps within the container.



Brenton H
07 Feb 2010

Thanks so much for reading Brenton! Stay tun
mountain gorillas and climate change coming

jamie
08 Feb 2010

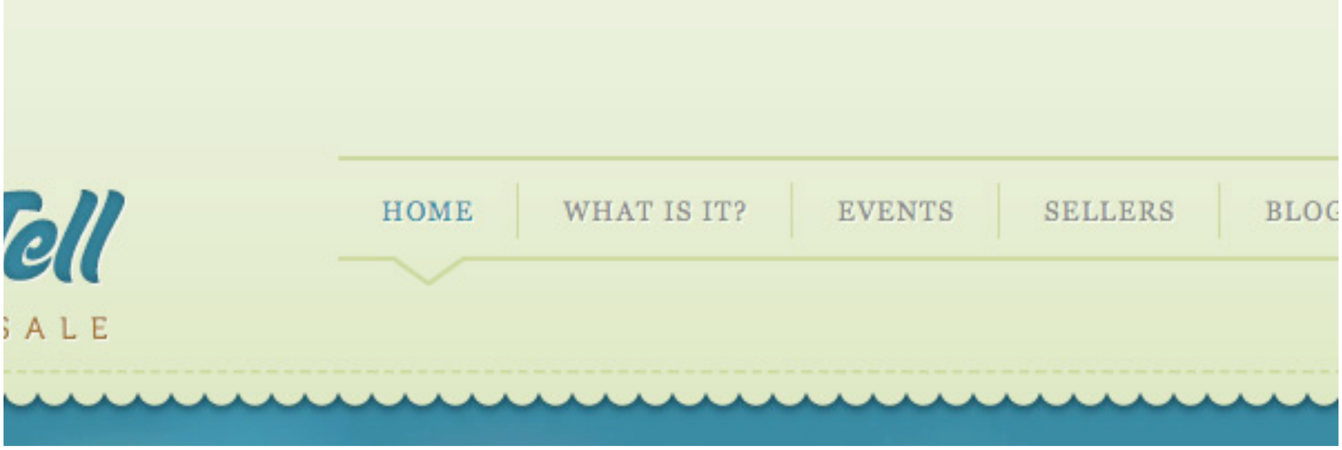
The International Gorilla Conservation Programme Web site uses `word-wrap` *for its commenters’ names.*

In theory, `word-wrap: break-word` should only be allowed when `text-wrap` is set to either `normal` or `suppress` (which suppresses line breaking). But in practice and for now, it works even when `text-wrap` is set to something else.

Bear in mind that according to the specification, the `break-strict` value for the `word-break` property is at risk of being dropped.

Word And Letter Spacing

Two other properties that are often used are `word-spacing` and `letter-spacing`. You can use them to control—you guessed it—the spacing between words and letters, respectively. Both properties support three different values that represent optimal, minimum and maximum spacing.



Show & Tell uses `letter-spacing` on its navigation links.

For `word-spacing`, setting only one value corresponds to the optimal spacing (and the other two are set to `normal`). When setting two values, the first one corresponds to the optimal and minimum spacing, and the second to the maximum. Finally, if you set all three values, they correspond to all three mentioned above. With no justification, optimal spacing is used.

It works slightly different for `letter-spacing`. One value only corresponds to all three values. The others work as they do for `word-spacing`.

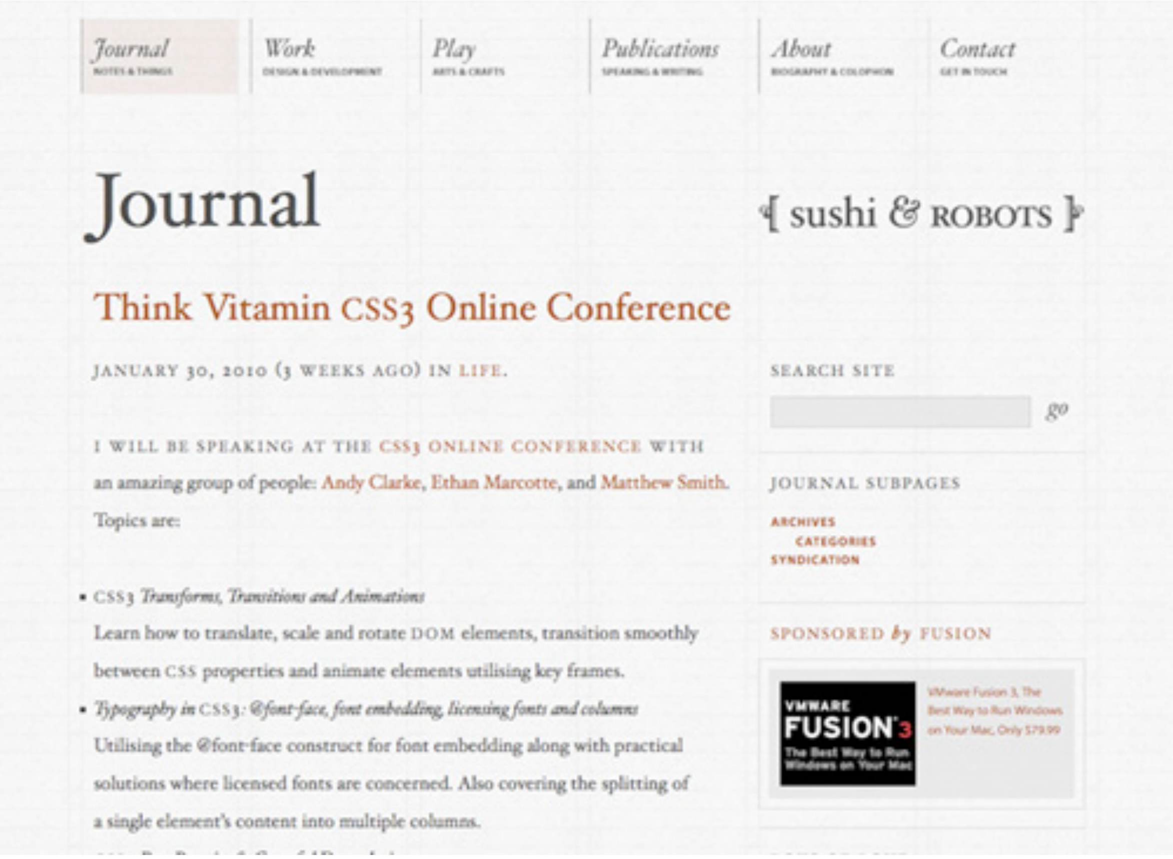
The specifications contain a few **requests for more information and examples** on how white-space processing will work and how it can be used and be useful for languages such as Japanese, Chinese, Thai, Korean, etc.

So, if you'd like help out, why not give it a read (it's not *that* long), and see how you can contribute?

Indentation And Hanging Punctuation

Text indentation and hanging punctuation are two typographical features that are **often forgotten** on the web. This is probably due to one of three factors:

- Setting them is not as straightforward as it could be;
- There has been a conscious decision not to apply them;
- Designers simply aren't aware of them or don't know how to properly use them.



Journal

Think Vitamin CSS3 Online Conference

JANUARY 30, 2010 (3 WEEKS AGO) IN LIFE.

I WILL BE SPEAKING AT THE CSS3 ONLINE CONFERENCE WITH an amazing group of people: Andy Clarke, Ethan Marcotte, and Matthew Smith. Topics are:

- CSS3 *Transforms, Transitions and Animations*
  Learn how to translate, scale and rotate DOM elements, transition smoothly between CSS properties and animate elements utilising key frames.
- *Typography in* CSS3: *@font-face, font embedding, licensing fonts and columns*
  Utilising the @font-face construct for font embedding along with practical solutions where licensed fonts are concerned. Also covering the splitting of a single element's content into multiple columns.

The Sushi & Robots Web site has hanging punctuation on bulleted lists.

So, the **theory** is that you should apply a small indentation to every text paragraph after the first one. You can easily do this with an adjacent sibling combinator:

```
p + p {
  text-indent: 1em;
}
```

This selector targets every paragraph (i.e. `p`) that follows another paragraph; so the first paragraph is not targeted.

Another typographic rule of thumb is that **bulleted lists and quotes** should be “hung.” This is so that the flow of the text is not disrupted by these visual distractions.

The CSS Text Level 3 specification has an (incomplete) reference to an upcoming hanging-punctuation property.

For now, though, you can use the `text-indent` property with negative margins to achieve the desired effect:

```
blockquote {
  text-indent: -0.2em;
}
```

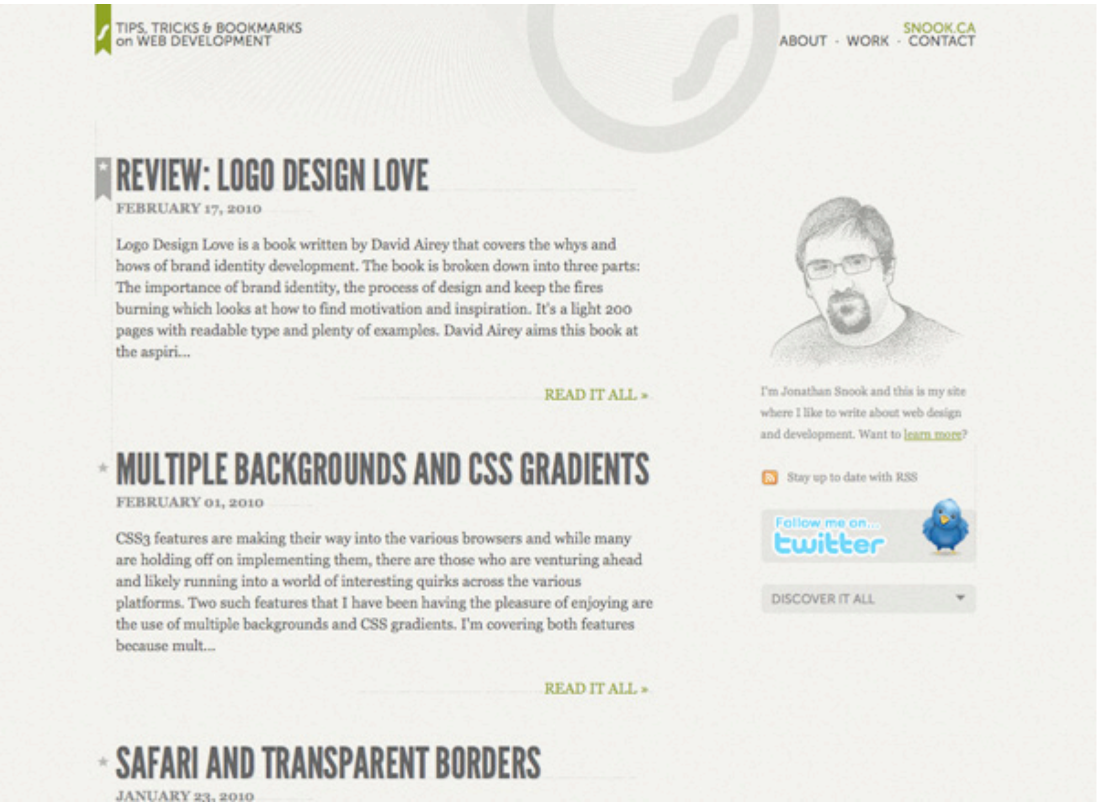
For bulleted lists, just make sure that the position of the bullet is set to `outside` and that the container `div` is not set to `overflow: hidden`; otherwise, the bullets will not be visible.

Web Fonts And Font Decoration

font-face

Much talk has been made on the web about `font-face` and whether it's a good thing—especially after the appearance of Typekit and Fontdeck.

The debate is mainly about how much visual clutter this could bring to Web designs. Some people (the argument goes) aren't sufficiently font-savvy to be able to pull off a design in which they are free to use basically any font they wish. Wouldn't our sensitive designer eyes be safer if only tested, approved web-safe fonts were used? On whatever side of the argument you fall, the truth is that the examples of Web sites that use `font-face` beautifully are numerous.



REVIEW: LOGO DESIGN LOVE

FEBRUARY 17, 2010

Logo Design Love is a book written by David Airey that covers the whys and hows of brand identity development. The book is broken down into three parts: The importance of brand identity, the process of design and keep the fires burning which looks at how to find motivation and inspiration. It's a light 200 pages with readable type and plenty of examples. David Airey aims this book at the aspiri...

MULTIPLE BACKGROUNDS AND CSS GRADIENTS

FEBRUARY 01, 2010

CSS3 features are making their way into the various browsers and while many are holding off on implementing them, there are those who are venturing ahead and likely running into a world of interesting quirks across the various platforms. Two such features that I have been having the pleasure of enjoying are the use of multiple backgrounds and CSS gradients. I'm covering both features because mult...

SAFARI AND TRANSPARENT BORDERS

JANUARY 23, 2010

I'm Jonathan Snook and this is my site where I like to write about web design and development. Want to learn more?

Jonathan Snook's recently redesigned Web site uses the `font-face` property.

The `font-face` property is fairly straightforward to grasp and use. Upload the font you want to use to your Web site (make sure the licence permits it), give it a name and set the location of the file.

In its basic form, this is what the `font-face` property looks like:

```
@font-face {
  font-family: Museo Sans;
  src: local(“Museo Sans”), url(MuseoSans.ttf) format(“opentype”);
}
```

The two required `font-face` descriptors are `font-family` and `src`. In the first, you indicate how the font will be referenced throughout your CSS file. So, if you want to use the font for `h2` headings, you could have:

```
h2 {
  font-family: Museo Sans, sans-serif;
}
```

With the second property (`src`), we are doing two things:

If the font is already installed on the user’s system, then the CSS uses the local copy instead of downloading the specified font. We could have skipped this step, but using the local copy saves on bandwidth.

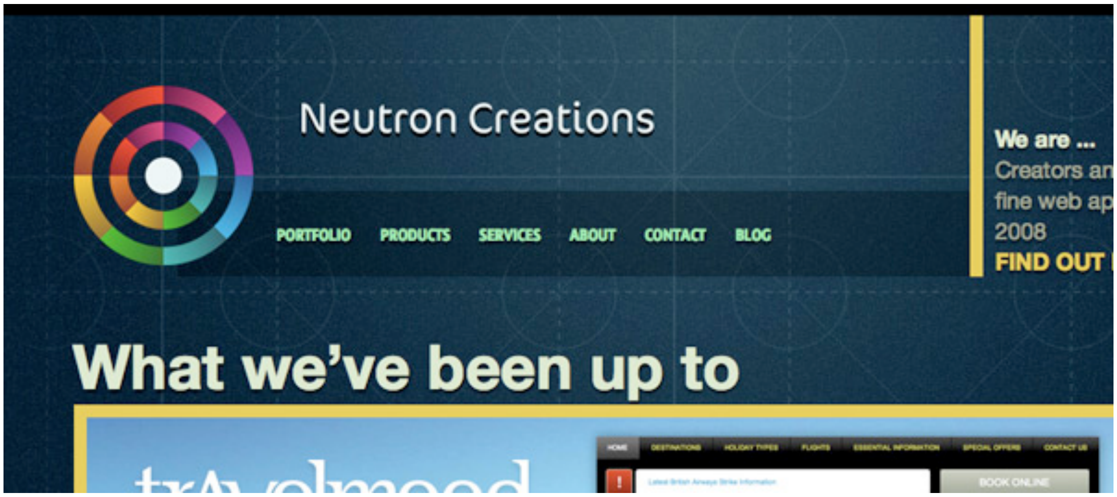
If no local copy is available, then the CSS downloads the file linked to in the URI. We also indicate the format of the font, but we could have skipped that step, too.

For this property **to work in IE**, we would also need the EOT version of the font. Some font shops offer multiple font formats, including EOT, but in many cases we will need to convert the TrueType font using Microsoft’s own WEFT, or another tool such as ttf2eot.

Some **good resources** for finding great fonts that can be used with `font-face` are Font Squirrel and Fontspring.

text-shadow

The `text-shadow` property allows you to **add a shadow to text easily** and purely via CSS. The shadow is applied to both the text and text decoration if it is present. Also, if the text has `text-outline` applied to it, then the shadow is created from the outline rather than from the text.



Neutron Creations Web site uses `text-shadow`.

With this property you can set the horizontal and vertical position of the shadow (relative to the text), the color of the shadow and the blur radius. Here is a complete `text-shadow` property:

```
p {
  text-shadow: #000000 1px 1px 1px;
}
```

Both the color and blur radius (the last value) are optional. You could also use an RGBa color for the shadow, making it transparent:

```
p {
  text-shadow: rgba(0, 0, 0, 0.5) 1px 1px 1px;
}
```

Here we define the R, G and B values of the color, plus an additional alpha transparency value (hence the `a`, whose value here is `0.5`).

The specification still has some open questions about `text-shadow`, like how should the browser behave when the shadow of an element overlaps the text of an adjoining element? Also, be aware that multiple text shadows and the `text-outline` property may be dropped from the specification.

New Text-Decoration Properties

One problem with the `text-underline` property is that it gives us little control. The [latest draft of the specification](), however, **suggests new and improved properties** that may give us fine-grained control. You can't use them yet, but we'll give you a condensed sneak peek at what may come.

`text-decoration-line`
Takes the same values as `text-decoration`: `none`, `underline`, `overline` and `line-through`.

`text-decoration-color`
Specifies the color of the line of the previous property.

`text-decoration-style`
Takes the values of solid, double, dotted, dashed and wave

`text-decoration`
The shorthand for the three preceding properties. If you specify a value of only one of `none, underline,` `overline` or `line-through`, then

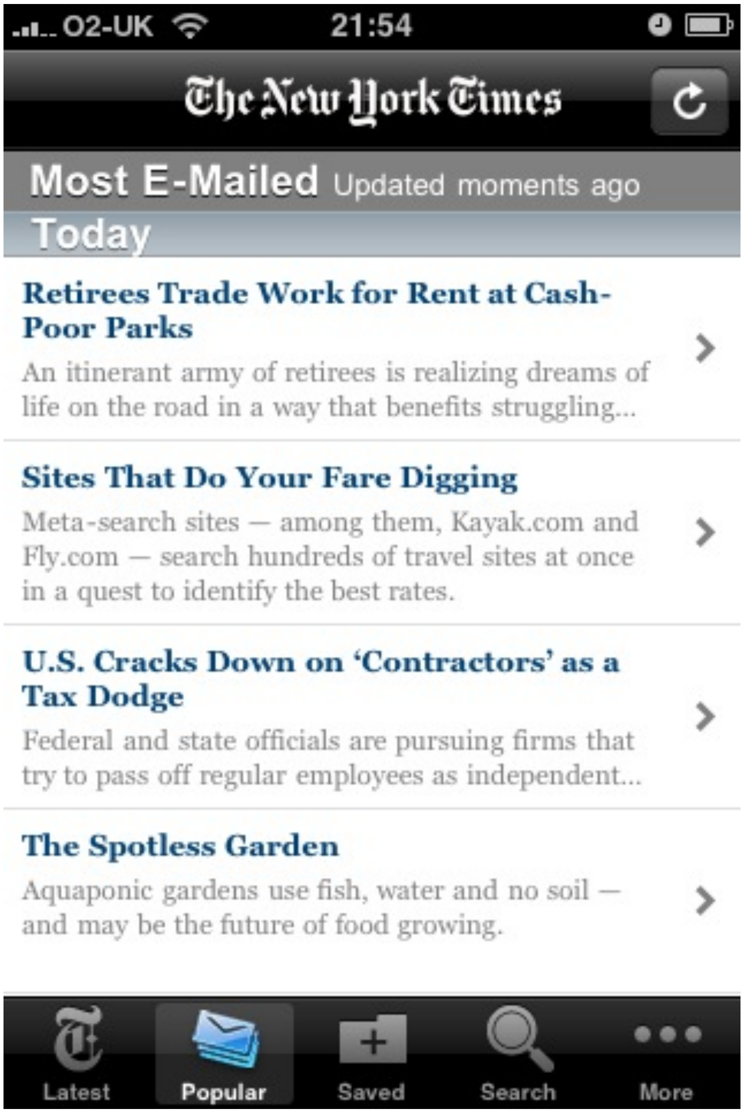
the property will be backwards-compatible with CSS Level 1 and 2. But if you specify all three values, as in `text-decoration: red dashed underline`, then it is ignored in browsers that don't support them.

`text-decoration-skip`
Specifies whether the text decoration should skip certain types of elements. The proposed values are `none`, `images`, `spaces`, `ink` and `all`.

`text-underline-position`
With this property, you can control, for example, whether the underline should cross the text's descenders or not: `auto`, `before-edge`, `alphabetic` and `after-edge`.

Controlling Overflow

The `text-overflow` property lets you control what is shown when **text overflows its container**. For example, if you want all of the items in a list of news to have the same height, regardless of the amount of text, you can use CSS to add ellipses (…) to the overflow to indicate more text. This technique is commonly seen in iPhone apps and Web sites.



Most E-Mailed Updated moments ago

Today

Retirees Trade Work for Rent at Cash-Poor Parks
An itinerant army of retirees is realizing dreams of life on the road in a way that benefits struggling...

Sites That Do Your Fare Digging
Meta-search sites — among them, Kayak.com and Fly.com — search hundreds of travel sites at once in a quest to identify the best rates.

U.S. Cracks Down on 'Contractors' as a Tax Dodge
Federal and state officials are pursuing firms that try to pass off regular employees as independent...

The Spotless Garden
Aquaponic gardens use fish, water and no soil — and may be the future of food growing.

The New York Times iPhone app uses an ellipsis for overflowing text.

This property works in the latest versions of Safari and Opera and in IE6 (where the overflowing element should have a set width, such as `100%`) and IE7. To be able to apply the property to an element, the element has to have `overflow` set to something other than `visible` and `white-space: nowrap`. To make it work in Opera, you need to add the vendor-specific property:

```
li {
  white-space: nowrap;
  width: 100%;
  overflow: hidden;
  -o-text-overflow: ellipsis;
  text-overflow: ellipsis;
}
```

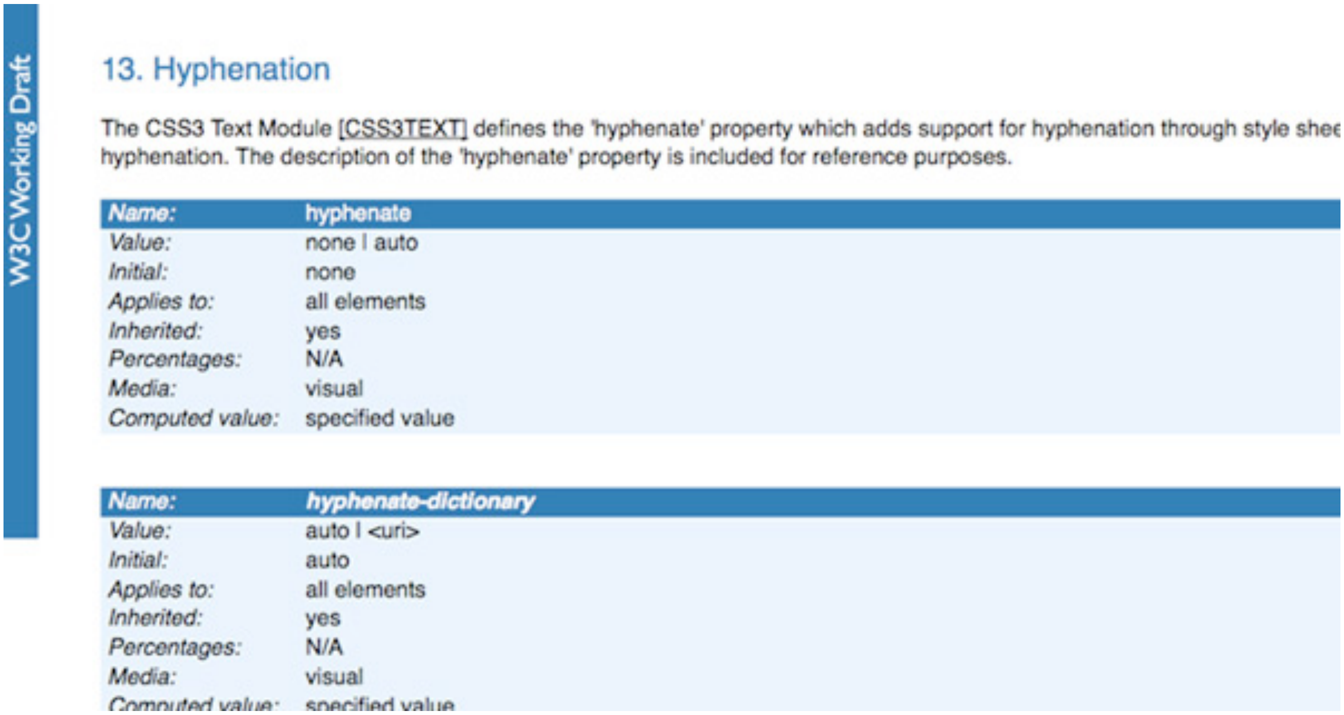
In the Editor's draft of the specification, you can see that other properties related to `text-overflow` are being considered, such as `text-overflow-mode` and `text-overflow-ellipsis`, for which `text-overflow` would be the shorthand.

Alignment And Hyphenation

Controlling hyphenation online is tricky. Many factors need to be considered when setting automatic hyphenation, such as the fact that different rules apply to different languages. Take Portuguese, in which you can hyphenate a word only at the end of a syllable; for double consonants, the hyphen must be located right in the middle.

The specification is still being developed, but the proposed properties are:

- hyphenate-dictionary
- hyphenate-before
- hyphenate-after
- hyphenate-lines
- hyphenate-character



13. Hyphenation

The CSS3 Text Module [CSS3TEXT] defines the 'hyphenate' property which adds support for hyphenation through style shee hyphenation. The description of the 'hyphenate' property is included for reference purposes.

Name:	hyphenate
Value:	none | auto
Initial:	none
Applies to:	all elements
Inherited:	yes
Percentages:	N/A
Media:	visual
Computed value:	specified value

Name:	*hyphenate-dictionary*
Value:	auto | <uri>
Initial:	auto
Applies to:	all elements
Inherited:	yes
Percentages:	N/A
Media:	visual
Computed value:	specified value

Proposed specification for hyphenation on the W3C Web site

This is a good example of how the **input of interested Web designers** is vital. Thinking about and testing these properties before they are finalized has nothing to do with being "edgy" or with showing off. By **proposing changes to the specification** and illustrating our comments with examples, we are contributing to a better and stronger spec.

Another CSS3 property that hasn't been implemented in most browsers (only IE supports it, and only partially) is `text-align-last`.

If your text is set to justify, you can define how to align the last line of a paragraph or the line right before a forced break. This property takes the following values: start, end, left, right, center and justify.

Unicode Range And Language

Unicode Range

The `unicode-range` property lets you define the **range of Unicode characters supported** by a given font, rather than providing the complete range. This can be useful to restrict support for a wide variety of languages or mathematical symbols, and thus reduce bandwidth usage.

Imagine that you want to include some Japanese characters on your page. Using the `font-face` rule, you can have multiple declarations for the same font-family, each providing a different font file to download and a different Unicode range (or even overlapping ranges). The browser should only download the ranges needed to render that specific page. To see examples of how `unicode-range` could work, head over to the spec's draft page.

Language

Use the `:lang` pseudo-class to create **language-sensitive typography**. So, you could have one background color for text set in French (`fr`) and another for text set in German (`de`):

```
div:lang(fr) {
  background-color: blue;
}

div:lang(de) {
  background-color: yellow;
}
```

You might be wondering why we couldn't simply use an attribute selector and have something like the following:

```
div[lang|=fr] {
  background-color: blue;
}
```

Here, we are targeting all `div` elements whose `lang` attribute is or starts with `fr`, followed by an –. But if we had elements inside that `div`, they wouldn't be targeted by this selector because their `lang` attribute isn't specified. By using the `:lang` pseudo-class, the `lang` attribute is **inherited to all children of the elements** (the whole `body` element could even be holding the attribute).

The good news is that all latest versions of the major browsers support this pseudo-class.

Conclusion

In surveying the examples in this article, you may be wondering why to bother with most of them. True, the specification is far from being approved, and it could change over time, but now is the time for experimentation and to contribute to the final spec.

Try out these new properties, and think of how they could be improved or how you could implement them to make your life easier in future. Having **examples of implementations** is important to the process of adding a property to the spec and, moreover, of implementing it in browsers. So, do your bit to improve the lot of future Web designers and your own.

Good Old @Font-Face Rule Revisted

Ralf Hermann

With the new possibilities of the CSS3 property @font-face a veritable gold digging atmosphere is taking hold of web designers. There's hope that the common monotony of system fonts will be abolished soon by web font embedding which enables web designers to choose practically any typeface and font-style they want – just like in print design. This article looks at the history and today's possibilities of web font embedding.

From the early days of the Internet web designers have used system fonts for the majority of Web sites. The Web site offers fonts like Times New Roman, Arial or Verdana to the browser. If the suggested font is installed on the client, the browser will use it. If not, the font is replaced by the client's default font. This means that web designers only have little influence on what the Web site will look like, because the same Web site will be displayed with different fonts on different computers and in different browsers.

```
h1 {
font-family: Verdana, Arial, Helvetica, sans-serif;
}
```

With regard to typography, the web is way behind of what's possible in print design. For example headlines: In print design condensed typefaces come in handy for headlines as they allow more words to fit in one line. In system font collections, however, there are usually no condensed fonts. Also, companies cannot ever use their own corporate fonts. Instead they have to replace their corporate typeface by standard fonts such as Arial, making a consistent corporate identity throughout all media impossible.

@font-face already existed at the end of the 1990s

The possibility of embedding any given font into a Web site has been around for a while. Netscape 4 as well as Internet Explorer 4 – which was the first browser to support the @font-face rule by the way – already supported @font-face end of the 1990s allowing the ability to deposit fonts on the server and deliver them through the web page.

```
@font-face {
font-family: Gentium;
src: url(fonts/gentium.eot);
}
```

However, this technique was ahead of its time. Font rendering used to employ simple grayscale anti-aliasing at that time. This was no problem for system fonts, which were laboriously optimized for rendering on screen, but other fonts were not rendered properly as they lacked the benefits of the manual on-screen optimization. Instead of improving web typography, the use of non-system fonts made Web sites even worse.

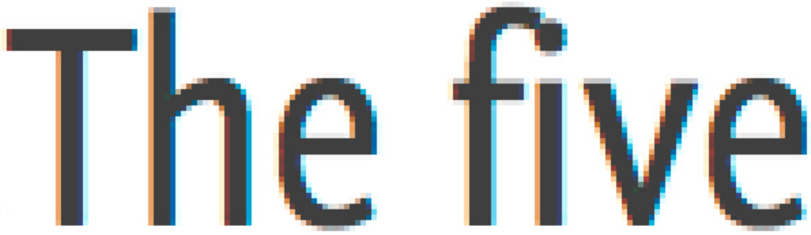
No wonder that the @font-face rule was removed in the CSS 2.1 specification. The use of system fonts remained the general practice in web design, especially for copy. For headlines, several work-arounds have been established, for example replacing the actual text by a bitmap file or a flash movie displaying the headline in a particular font. These flash movies themselves may utilize font embedding.

Another approach, which has come up in the past few years is the replacement of headlines by vector graphics with the help of Java Script. Services that offer this functionality are Typeface.js and Cufón. But all of these techniques have some problem or another – be it the incompatibility with search engines or problems with zooming in and out of Web sites.

Successful second run thanks to subpixel rendering

The introduction of Safari 3.1 by Apple marked a turning point in the use of web fonts. This browser update brought back the old @font-face rule. A significant improvement came in the introduction of flat panel LCD monitors. These monitors, with a much higher screen resolution along with anti-aliasing via subpixel rendering have since become standard. Subpixel rendering makes use of the fact that each pixel on a color LCD is composed of individual red, green and blue subpixels. It uses these subpixels to anti-alias text, which increases the apparent resolution of an LCD display thus improving the rendering of text, even with very small font sizes.

On Mac OS X platforms this function is activated by default. Windows uses its own trademark ClearType, which is activated by default in Windows Vista and Windows 7, but kept turned off in Windows XP. In Microsoft Office 2007/2010, Internet Explorer 7 and higher, as well as Windows Live Messenger, the option ClearType is turned on by default, even if it is not enabled throughout the operating system.



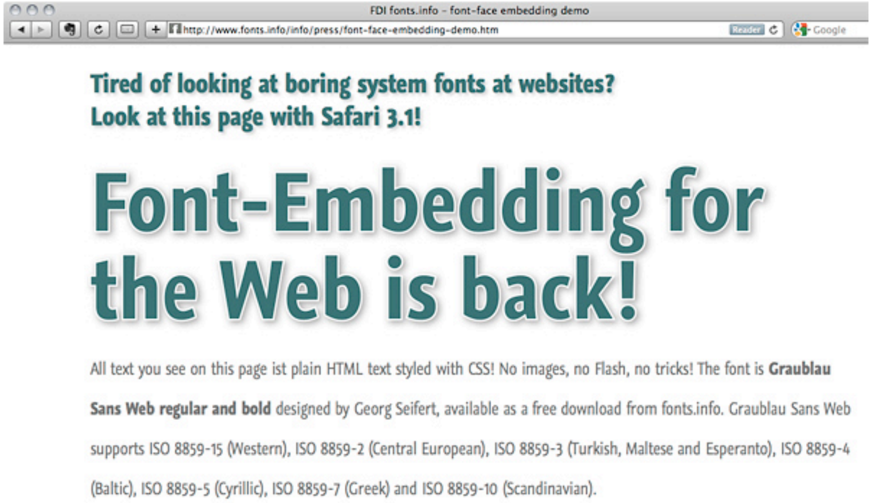
Today's subpixel rendering as displayed in Safari on Mac OS X.

What is remarkable about Safari's @font-face support is the fact that for the first time embedding of standard formats, namely TrueType (ttf) and OpenType (ttf/otf), is possible without any prior conversion as the following css code shows.

```
@font-face {
font-family: GraublauWeb;
src: url(fonts/graublau.otf) format ("opentype");
}
```

The Font Foundries' Concerns

Suppliers of commercial fonts, however, where not exactly happy about the new functionality, because it means that everybody can download the embedded fonts and use them without paying a licence fee.


FDI fonts.info - font-face embedding demo
http://www.fonts.info/info/press/font-face-embedding-demo.htm
Reader
Google

Tired of looking at boring system fonts at websites?
Look at this page with Safari 3.1!

Font-Embedding for the Web is back!

All text you see on this page ist plain HTML text styled with CSS! No images, no Flash, no tricks! The font is **Graublau Sans Web regular and bold** designed by Georg Seifert, available as a free download from fonts.info. Graublau Sans Web supports ISO 8859-15 (Western), ISO 8859-2 (Central European), ISO 8859-3 (Turkish, Maltese and Esperanto), ISO 8859-4 (Baltic), ISO 8859-5 (Cyrillic), ISO 8859-7 (Greek) and ISO 8859-10 (Scandinavian).

Safari 3.1 offers support for standard font formats for the first time – demo.

A vivid debate among browser companies and fount foundries was the result. While the foundries want commercial fonts to be protected from bootleg copies and unlawful use of fonts that are subject to licensing, browser companies do not feel obliged to claim the foundries' copyrights. Just like with assets such as pictures, video or text, which copyrights are not controlled by the browser itself, the content providers were obliged to declare copyright protected fonts used on their Web sites, browser companies argue.

The Current Web Font Formats

Ralf Hermann

The relatively new possibility of embedding any font you like into Web sites via @font-face is an additional stylistic device, which promises to abolish the monotony of the usual system fonts. But it would have been all too easy, if there was only one web font format. Instead there's quite a variety which we are going to present here.

Web Font Formats

EOT, TTF, OTF, CFF, AFM, LWFN, FFIL, FON, PFM, PFB, WOFF, SVG, STD, PRO, XSF, ...

To find one's way in this veritable jungle of font formats is not exactly easy. On the following pages we'll have a closer look at the pros and cons of those font formats that are particularly relevant for their use on Web sites.

TrueType

This format was developed in the late 1980s as a competitor to Adobe's Type 1 fonts used in PostScript. As a scalable outline format, it replaced the at that time common bitmap fonts being used for screen display. Microsoft took up the TrueType format as well and it soon evolved into the standard format for system fonts due to the fact that it offered fine-tuned control for a precise display of font at particular sizes.

OpenType

Microsoft and Adobe teamed up in developing this format. Based on the TrueType format, OpenType offers additional typographical features such as ligatures, fractions or context sensitive glyphs and the like. However, browser support of these features common in sophisticated layout and illustration programs is still unsatisfactory.

You should also know that there are two different versions of OpenType fonts, depending on the outline technology used. There are:

- OpenType fonts with **TrueType Outlines** (OpenType TT)
- OpenType fonts with **PostScript Outlines** (OpenType PS)

OpenType comes in two different versions.

OpenType PS is a so-called CFF based file format (CFF = compact file format). This is relevant when using OpenType PS fonts as web fonts, because PostScript based formats are **displayed without subpixel rendering** on Windows platforms which affects the rendering quality considerably.

That’s why **TrueType based fonts are the better choice as web fonts**, even though Microsoft will solve this rendering issue in the future.

As the structures of TrueType and OpenType fonts are very similar, **browsers most likely support both formats**. At any rate, browser support is available in Safari 3.1 and higher, Firefox 3.5 and Opera 10.

EOT

Internet Explorer has supported the proprietary Embedded OpenType (EOT) standard from the late 1990s. It’s a variation of the TrueType and OpenType formats that provide the following particularities:

- EOT fonts are a compact form of OpenType optimized for quick delivery on the web due to data compression.
- By means of URL-binding, EOT fonts can be tied to a specific domain. The fonts can then only be delivered to and used on those web pages. The technique helps prevent fonts from being copied and used without licence.

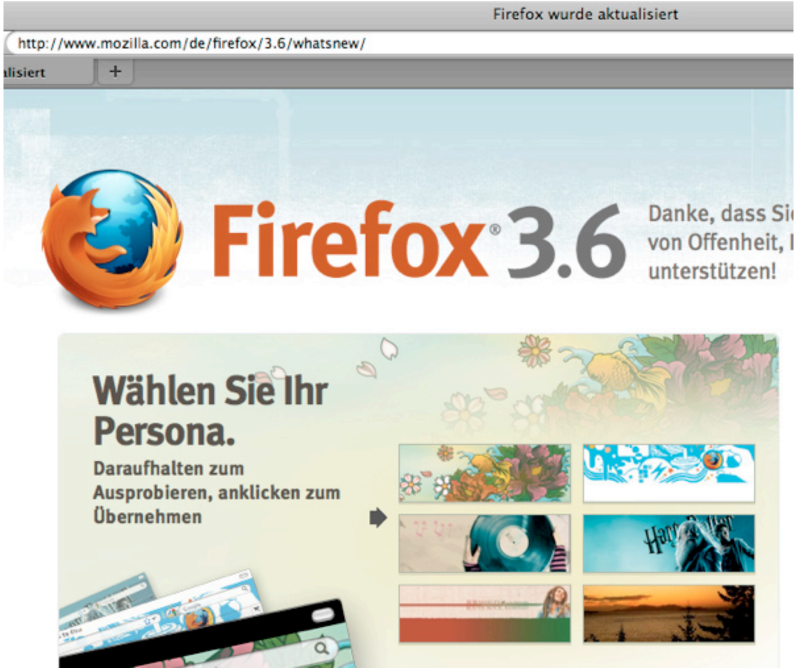
EOT is exclusively supported by Internet Explorer. Even though it might not succeed as web font format in the future, it still makes sense to use this format today in order to supply the users of various IE versions with modern web fonts. Current IE versions (< 9) do not use any other format.

If you want to convert TTF fonts to natively compressed EOT files, you can use eotfast – it’s a free program for Windows and Mac.

WOFF

Unlike EOT, the web Open Font Format (WOFF) is in the process of being standardized as a recommendation by the World Wide Web Consortium (W3C). The W3C published WOFF as a working draft in July 2010.

WOFF came into existence as a kind of a compromise between font foundries and browser companies. No wonder that WOFF has been developed by two font designers (Erik van Blokland and Tal Leming) in cooperation with Mozilla developer Jonathan Kew. When it comes right down to it, WOFF is rather a wrapper that contains TrueType and OpenType fonts than a new format of its own. WOFF uses an integrated compression algorithm named zlib, which offers file size reduction for TrueType fonts of over 40%. Further more, meta data can be added, e.g. a user's licence. However, this data only presents informational material – it is not validated by browsers.


Firefox wurde aktualisiert
http://www.mozilla.com/de/firefox/3.6/whatsnew/
alisiert
+
Firefox 3.6
Danke, dass Si
von Offenheit, I
unterstützen!
Wählen Sie Ihr Persona.
Daraufhalten zum Ausprobieren, anklicken zum Übernehmen

Thanks to WOFF Mozilla can use it's corporate typeface FF Meta.

The format has been supported by Firefox since version 3.6, Google Chrome since version 5.0. All other browser manufacturers are working on adding full support in future releases.

Fonts can be converted into the WOFF format by the online service FONT SQUIRREL free of charge.

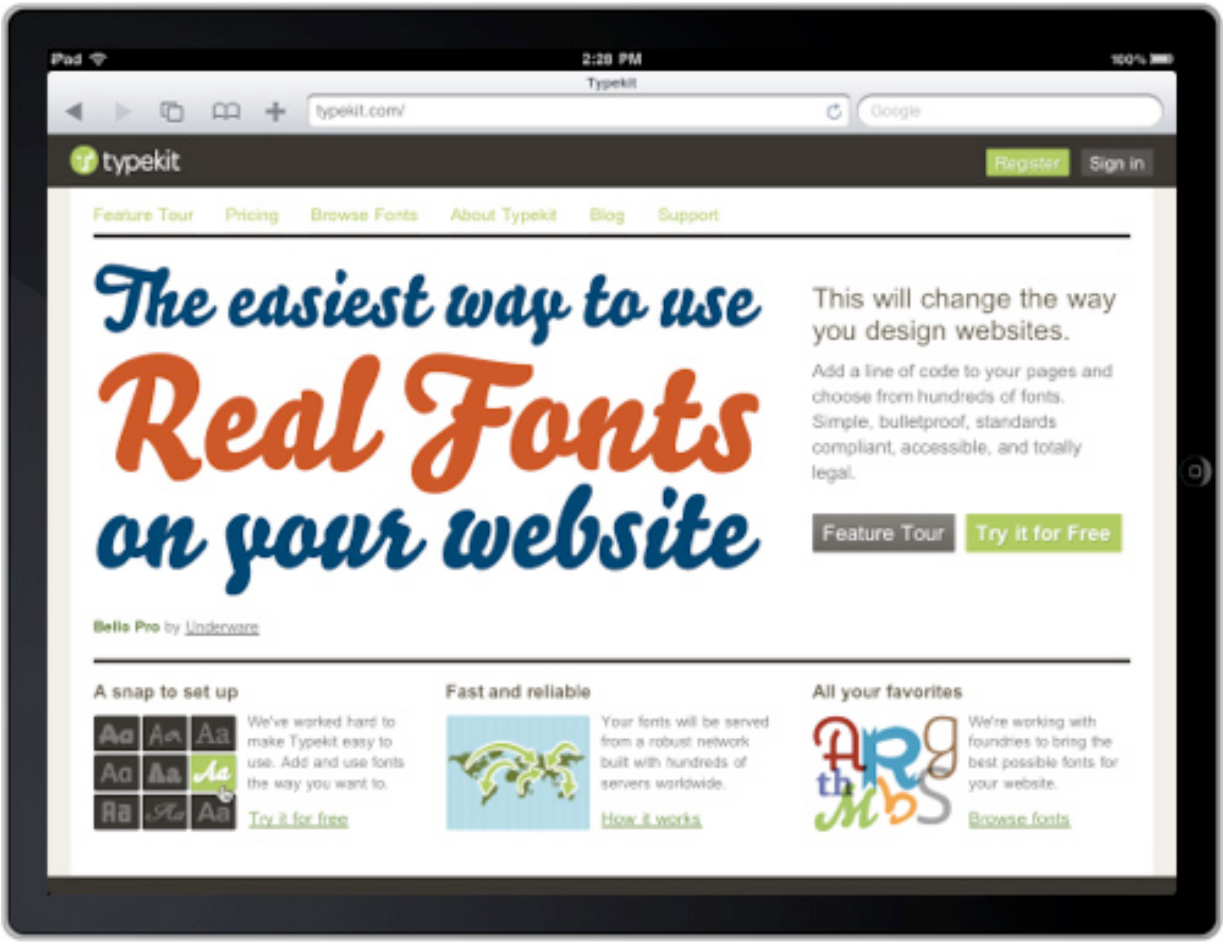
SVG

SVG fonts are text files that contain the glyph outlines represented as standard SVG elements and attributes, as if they were single vector objects in the SVG image. But this is also one of the biggest disadvantages of SVG fonts. While EOT, WOFF and PostScript-flavoured OpenType have compression built into the font format, SVG fonts are always uncompressed and usually pretty large.

SVG fonts are not really an alternative to the other web font formats. However, as Mobile Safari only supports SVG fonts so far, it is the only format that can be used for the iPhone and iPad prior to iOS 4.2.

Tools, such as Font Squirrel, can be used to convert fonts into this format.

Another possibility to obtain SVG fonts is to rent them from one of the numerous web font providers.



This will change the way you design websites.

Add a line of code to your pages and choose from hundreds of fonts. Simple, bulletproof, standards compliant, accessible, and totally legal.

A snap to set up

We've worked hard to make Typekit easy to use. Add and use fonts the way you want to.

Fast and reliable

Your fonts will be served from a robust network built with hundreds of servers worldwide.

All your favorites

We're working with foundries to bring the best possible fonts for your website.

Typekit also serves its fonts as SVG files for the iPhone and iPad.

Review of Popular Web Font Embedding Services

Andrew Follett

In the mid-80s the desktop publishing revolution began with the introduction of the Mac Plus, Aldus PageMaker and the Apple LaserWriter printer. It took quite a few years for these tools to make an impact on the design and publishing world, but once they did, there was no looking back.

In 2010 we see a similar revolution starting to take shape with web fonts. Even though `@font-face` was introduced in the CSS2 spec in 1998, it wasn't until this past year that all in-use web browsers added support for it. In 2010 we have also seen a wave of web font services being marketed, and this could have a profound impact on web typography.

Web font services, like Typekit and now the Google Font API, have captured a lot of attention. But in the middle of 2010 there's been an explosion of new services; services like Fonts Live, Fontdeck, Webtype and others with conjugated names involving "Font" or "Type".

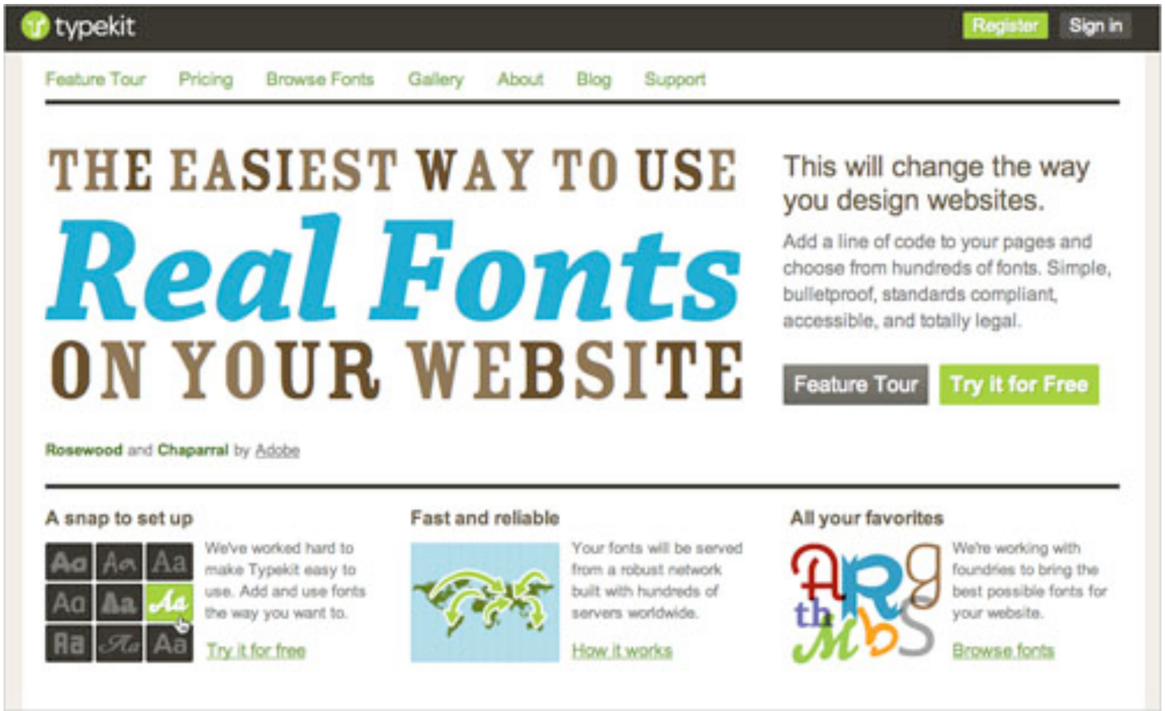
Comparison of 10 popular web font services

While all of these services are unique, they each provide a tool for web designers and developers to legally display professional fonts on their Web site. The following guide compares 10 of these services, breaking down the pros and cons of each.

We hope this comparison will help you make a more informed decision on which service to use when you venture into the ever-growing, sometimes confusing, world of web fonts.

Typekit

Typekit, Inc. is a popular web font service from Small Batch Inc and founder Jeffrey Veen. Typekit was one of the first services on the scene and is currently one of the most widely adopted services on the market.



THE EASIEST WAY TO USE Real Fonts ON YOUR WEBSITE

This will change the way you design websites.

Add a line of code to your pages and choose from hundreds of fonts. Simple, bulletproof, standards compliant, accessible, and totally legal.

Rosewood and Chaparral by Adobe

A snap to set up

We've worked hard to make Typekit easy to use. Add and use fonts the way you want to.

Fast and reliable

Your fonts will be served from a robust network built with hundreds of servers worldwide.

All your favorites

We're working with foundries to bring the best possible fonts for your website.

Font Selection

4,000 (about half of these are through the Typekit library, and the other half via licensing arrangements with foundries who sell their own web licences)

Advantages Over Other Services

Strong platform integrations. Typekit is a scaled service, with well over 80 million unique users each month.

Pros

Extremely easy setup for designers and developers, allowing integration within minutes. Integration with Google Font API and blogging platforms including WordPress, Posterous and Typepad. The full font library is available via most plans for a single low price, allowing customers to try different fonts on one site as well as use different fonts on multiple projects. Now offering Adobe fonts. Enterprise customers can self-host using their own CDN. The service allows you to host custom fonts. The simple free plan doesn’t expire.

Cons

Implementation requires JavaScript (although on the Typekit blog they list some reasons that JavaScript-based implementation has its advantages). Fonts are not available for desktop use.

Pricing

Free trial account includes the use of 2 fonts on 1 Web site. Paid plans start at $24.99 per year (2 sites, 5 fonts per site). The more popular plans allow unlimited font usage on unlimited domains.

Fee Schedule

Annual subscription

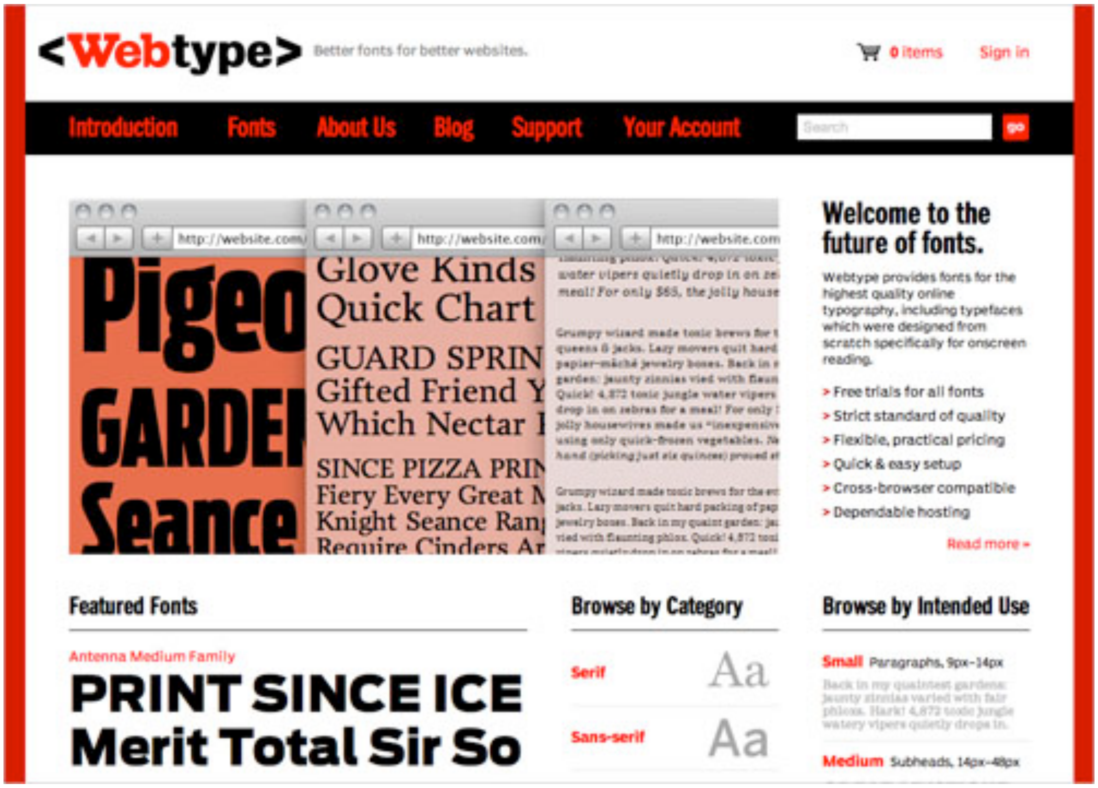
Our Experience with Typekit

Setting up TypeKit is fairly straightforward. You just set the domains you want to use (the free trial site includes one domain and up to two fonts) and then build your kit by adding fonts. A little JavaScript inserted into the header pulls in all the necessary CSS information. You can also reference the fonts in your own CSS, and use wild cards when adding to your list of allowed domains (e.g. *.domain.com will work on sub.domain.com).

As is the case with any web font service, there is a brief delay before the proper font is shown, but it's barely noticeable. Since Typekit's fonts are loaded via JavaScript, TypeKit offers tools to control the loading process, so delays are not as noticeable to the user.

Webtype

Webtype is a recent creation of The Font Bureau, Ascender, DevBridge, and font experts Roger Black and Peter Van Blokland. Webtype is all about quality and boasts "fonts for the highest quality online typography, including typefaces which were designed from scratch specifically for onscreen reading".



Welcome to the future of fonts.

Webtype provides fonts for the highest quality online typography, including typefaces which were designed from scratch specifically for onscreen reading.

- Free trials for all fonts
- Strict standard of quality
- Flexible, practical pricing
- Quick & easy setup
- Cross-browser compatible
- Dependable hosting

Back in my quaintest gardens: Jaunty zinnias varied with fair phlox. Hark! 4,872 toxic jungle watery vipers quietly drops in.

Font Selection
365

Advantage Over Other Services
Font quality

Pros
Quick and easy setup. Flexible pricing. Ability to host custom fonts as well as self-host. JavaScript-free integration. Desktop licence available.

Cons
Some fonts are expensive compared to other web font services.

Pricing
Free 30-day trial on all fonts. Fonts start at $10 per year per site.

Fee Schedule
Annual subscription

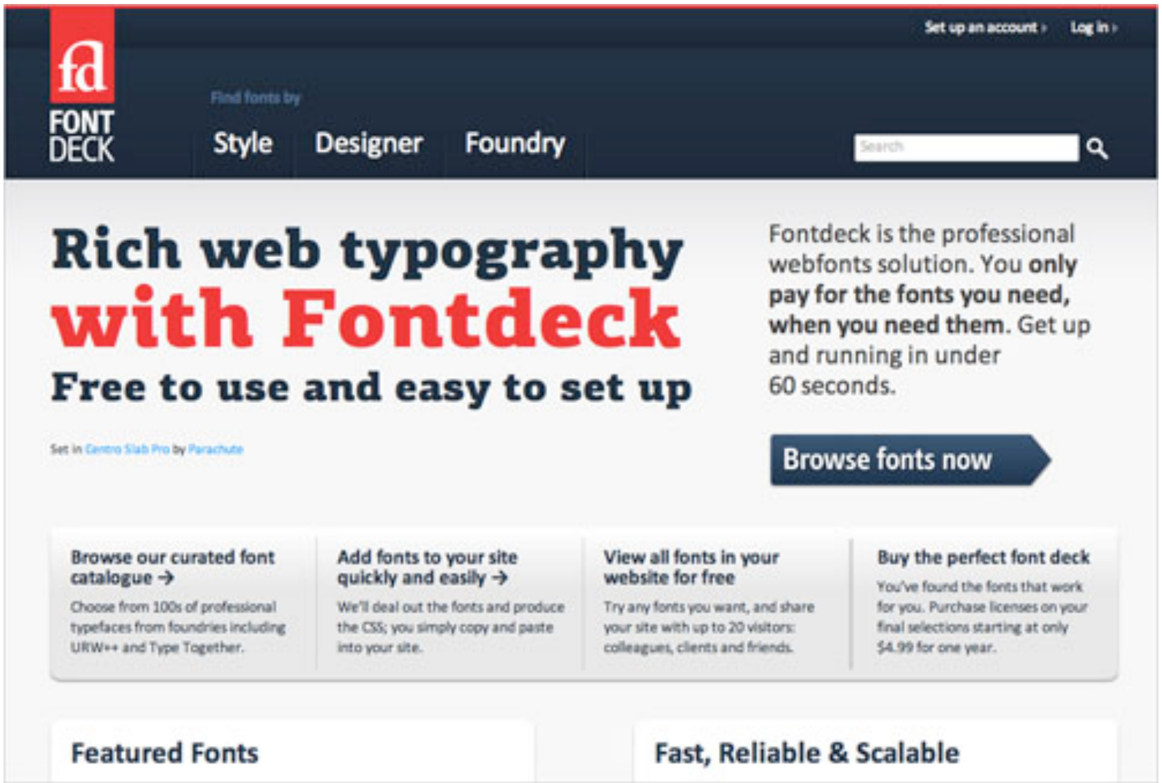
Our Experience with Webtype

Webtype was easy to set up and use from the signup process on. Just browse and purchase fonts (a 30-day free trial licence is available for testing fonts) and then create projects. Select the font you want to use for each project and you'll be given a link code and CSS selector for each font. Then you copy and paste them into your HTML and CSS files and you're ready to go.

Make sure you click "Save" from the CSS resource page that gives you the code, or it won't be live. Resource size is also given on this page, which can be helpful if you're trying to estimate bandwidth usage. The load time for the font was possibly a bit slower than some of the other services here, despite the small file size of the font tested.

Fontdeck

Fontdeck is a relatively new service by Clearleft and OmniTI. It was conceived in March 2009 by Jon Tan and Richard Rutter as a way to bring quality fonts to a wide audience while leveling the playing field for type foundries. It went into private beta in January 2010 and was open to the public in June of 2010.



Rich web typography with Fontdeck

Free to use and easy to set up

Set in Centro Slab Pro by Parachute

Fontdeck is the professional webfonts solution. You **only pay for the fonts you need, when you need them.** Get up and running in under 60 seconds.

Browse our curated font catalogue →
Choose from 100s of professional typefaces from foundries including URW++ and Type Together.

Add fonts to your site quickly and easily →
We'll deal out the fonts and produce the CSS; you simply copy and paste into your site.

View all fonts in your website for free
Try any fonts you want, and share your site with up to 20 visitors: colleagues, clients and friends.

Buy the perfect font deck
You've found the fonts that work for you. Purchase licenses on your final selections starting at only $4.99 for one year.

Featured Fonts

Fast, Reliable & Scalable

Font Selection

600, with plans for this number to be doubled before Christmas.

Advantage Over Other Services

Only pay for the fonts you want to use. No bandwidth limit. Unlimited trial periods for all fonts (with a 20 IP address cap).

Pros

Easy to set up. Affordable options available. Automatically include similar style fonts in the font stack. Pure CSS with no JavaScript required.

Cons

No self-hosting option available. Fonts not available for desktop use.

Pricing

Some free fonts, but most start at $2.50 per year per site.

Fee Schedule

Annual subscription (which applies only to fonts on live Web sites; as mentioned, all fonts have unlimited trial periods).

Our Experience with Fontdeck

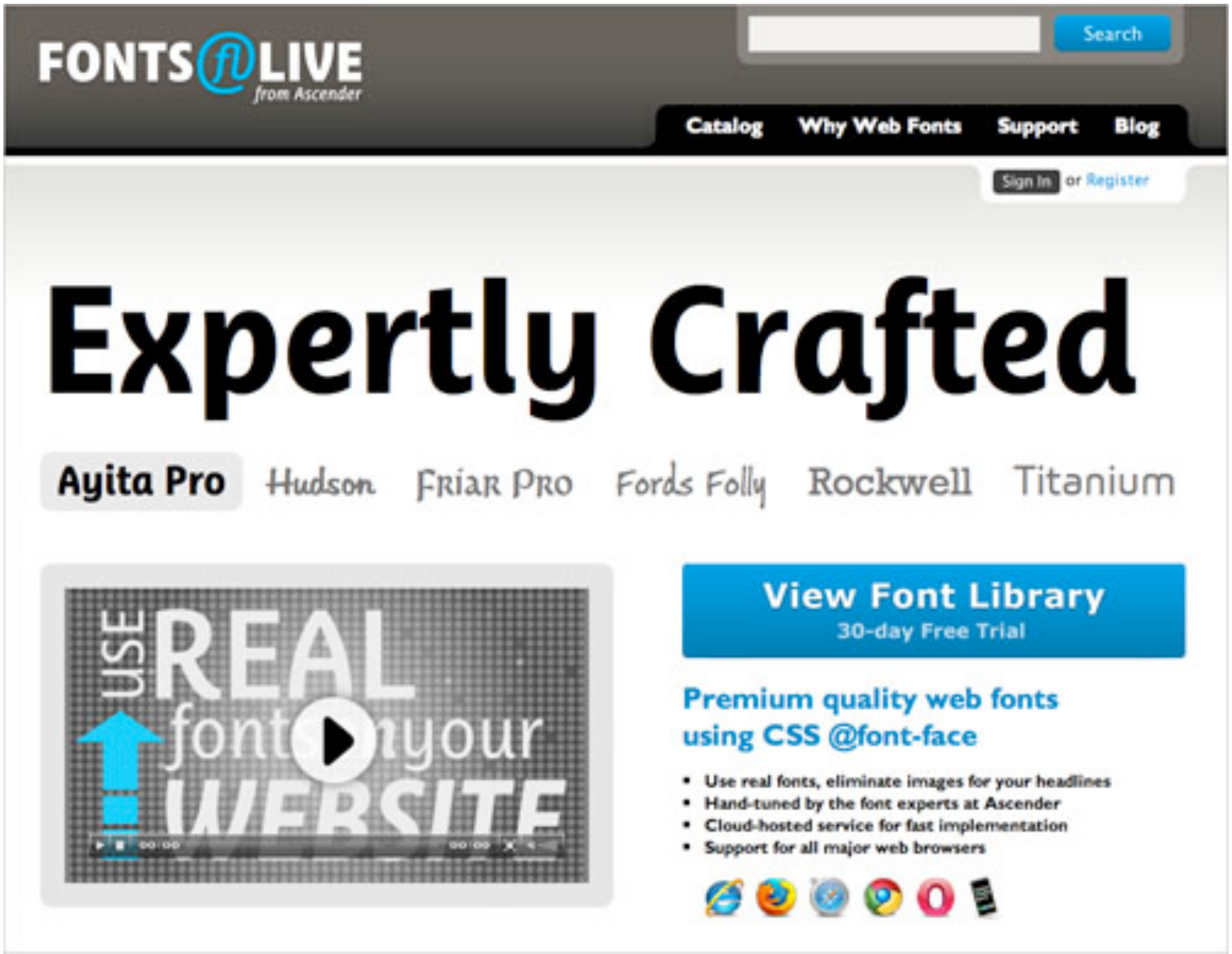
Fontdeck was incredibly easy to set up. While it does require manual insertion of the CSS selectors into the stylesheet for your site (which is by design, to give designers as much control as possible), it provides the code for this immediately without the added step of setting up a stylesheet (the link is ready as soon as you select to add the font). Prior to purchasing the licence, the first 20 visitors to your site can see the font.

I did find that I had to add the subdirectory to the hostname in order to get it working. But all the options and controls are located on a single page for each font, making it easy to update settings. Fonts are displayed quickly, but as with the other services, there is a split of a second when you can see the default font.

One added bonus from Fontdeck is that they include similar style fonts in the font stack, in case the user's browser doesn't support `@font-face`, and to help with the perceived change in text. Many of the other services just use the default font or a generic serif/sans-serif.

Fonts Live

Fonts Live is a new web font service from Ascender Corporation — the company behind the "Droid" fonts for Google's Android mobile platform, the "Segoe" family of fonts for Microsoft Windows, and the Ascender Fonts desktop font web store. Fonts Live is similar to Webtype (both were developed by DevBridge), however, Fonts Live serves fonts exclusively from Ascender and its partners.



Expertly Crafted

Premium quality web fonts using CSS @font-face

- Use real fonts, eliminate images for your headlines
- Hand-tuned by the font experts at Ascender
- Cloud-hosted service for fast implementation
- Support for all major web browsers

Font Selection

499

Advantage Over Other Services

Font quality

Pros

Flexible pricing. Desktop licence available. Option to self-host web fonts. Integration with Google Font API. JavaScript-free integration. Now offering Hallmark fonts.

Cons

Some fonts are expensive compared to other web font services. Back-end was among the least user-friendly of the services featured here.

Pricing

Free 30-day trial on all fonts. Fonts start at $10 per year per site.

Fee Schedule

Annual subscription

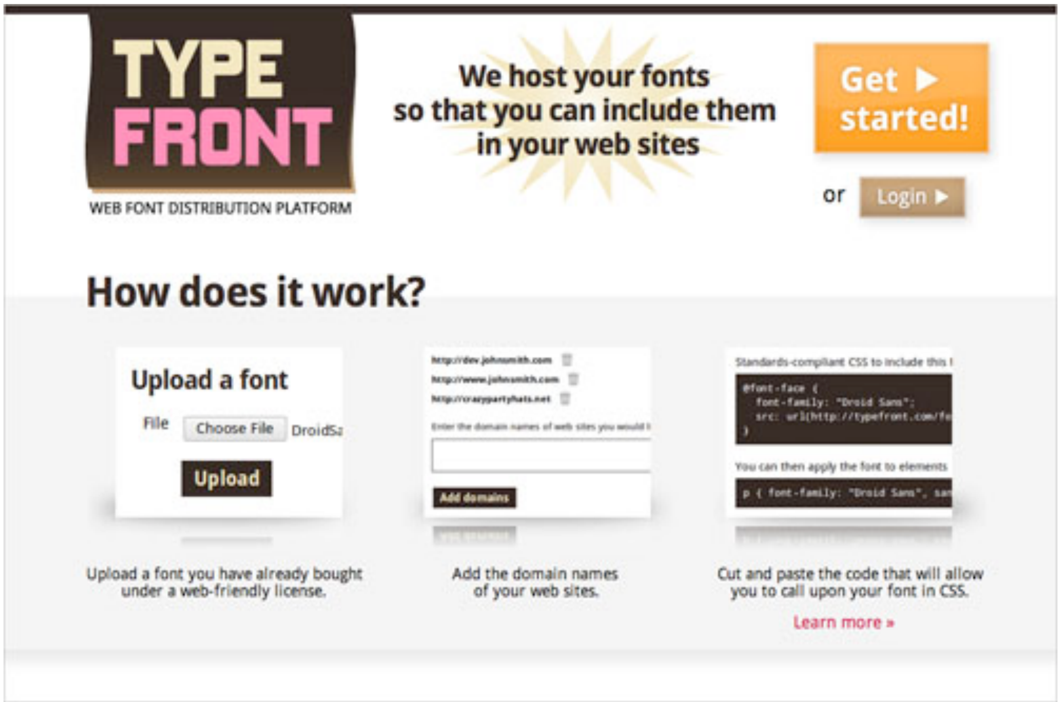
Our Experience with Fonts Live

Setting up Fonts Live is a bit more labor intensive than setting up some others featured here. Setting up the service wasn't without its bugs, either. First of all, read the documentation before you start, or you're likely to get confused. With the first font I tried (Corsiva Italic), the site was unable to set up the resource and kept returning errors. It also created blank files for each of these failures, meaning I had to go in and manually delete them. Not sure if this was just an exception for that particular font or if it's a more widespread problem. There was no mention of it in the site's documentation.

I had better luck with the second font I tried (Romany). This time it created the resource without any issues. From there, you have to insert the stylesheet ("resource" in Fonts Live terms) link in your header and then insert the font family, style, and weight for whichever elements you want styled. The plus side here is that you don't run into issues with your original stylesheet interfering. Once it was up and running, however, it was noticeably faster serving the fonts than TypeKit, though this is likely due to smaller file sizes in the fonts used.

TypeFront

TypeFront is a hosting-only service which lets you upload a font you already own, as long as it has a web-friendly licence (make sure you read the licence agreement carefully!). Once you add the domain(s) you want to use, TypeFront provides you with the code to add to your Web site.



http://dev.johnsmith.com
http://www.johnsmith.com
http://crazypartyhats.net

Enter the domain names of web sites you would l

Standards-compliant CSS to include this f

```
@font-face {
  font-family: "Droid Sans";
  src: url(http://typefront.com/fo
}
```

You can then apply the font to elements

```
p { font-family: "Droid Sans", san
```

Upload a font you have already bought under a web-friendly license.

Add the domain names of your web sites.

Cut and paste the code that will allow you to call upon your font in CSS.

Font Selection: N/A

Advantage Over Other Services
Ideal for do-it-yourself designers and developers who understand the ins and outs of web typography.

Pros
Inexpensive. No noticeable delay when displaying web fonts.

Cons
You must supply your own fonts. Requires a solid understanding of your font licence agreement.

Pricing
Free plan offers 1 font and 500 requests per day. Paid plans start at $5 per month (Australian dollars) and include 10 hosted fonts and 5000 requests per day. 30-day trial on all paid plans.

Fee Schedule
Monthly subscription

Our Experience with TypeFront

Once you've signed up for an account, uploading fonts is simple. Just make sure the fonts you're using have a web-friendly licence. From this point you have to enable the format you'd like to use for the font (included are EOT, OpenType, SVG, TrueType, and WOFF — at least for the font I used). Once one of those formats is enabled, you have to add domains.

After you've enabled your formats and set up the domains you want to use, you have to copy the `@font-face` code into your CSS files and add the font to your font stacks. The big advantage TypeFront has over the other services listed here is that there is no noticeable delay before the correct font is displayed.

Fontspring

Fontspring offers downloadable fonts for self-hosting. Unlike a hosted service, Fontspring provides downloadable font files and sample code to host web fonts on your own.

The fonts
99.9% of our fonts can be purchased with @font-face licenses. Get the fonts you want on your site. Start browsing →

The foundries
We have a growing library of typefaces from an incredibly talented pool of font designers. Show me now →

What's @font-face?
Get up to speed on @font-face usage, best practices and how Fontspring web fonts work. Get info →

Tweet tweet
Follow us on twitter to stay informed about the latest fonts and @font-face developments. @Fontspring →

Kalico: 2 fonts by Miller Type Foundry. Starting at $26

OpenType for your desktop and webfonts for your sites. Go →

Font Selection
1,937 families

Advantage Over Other Services
No recurring subscription fee

Pros
Large font selection. No recurring fees or bandwidth restrictions. Desktop licence included.

Cons
Font quality varies. Self-hosting only, which requires additional setup and technical skills.

Pricing
Free or up to several hundred dollars depending on the font family

Fee Schedule
One-time fee

Our Experience with Fontspring

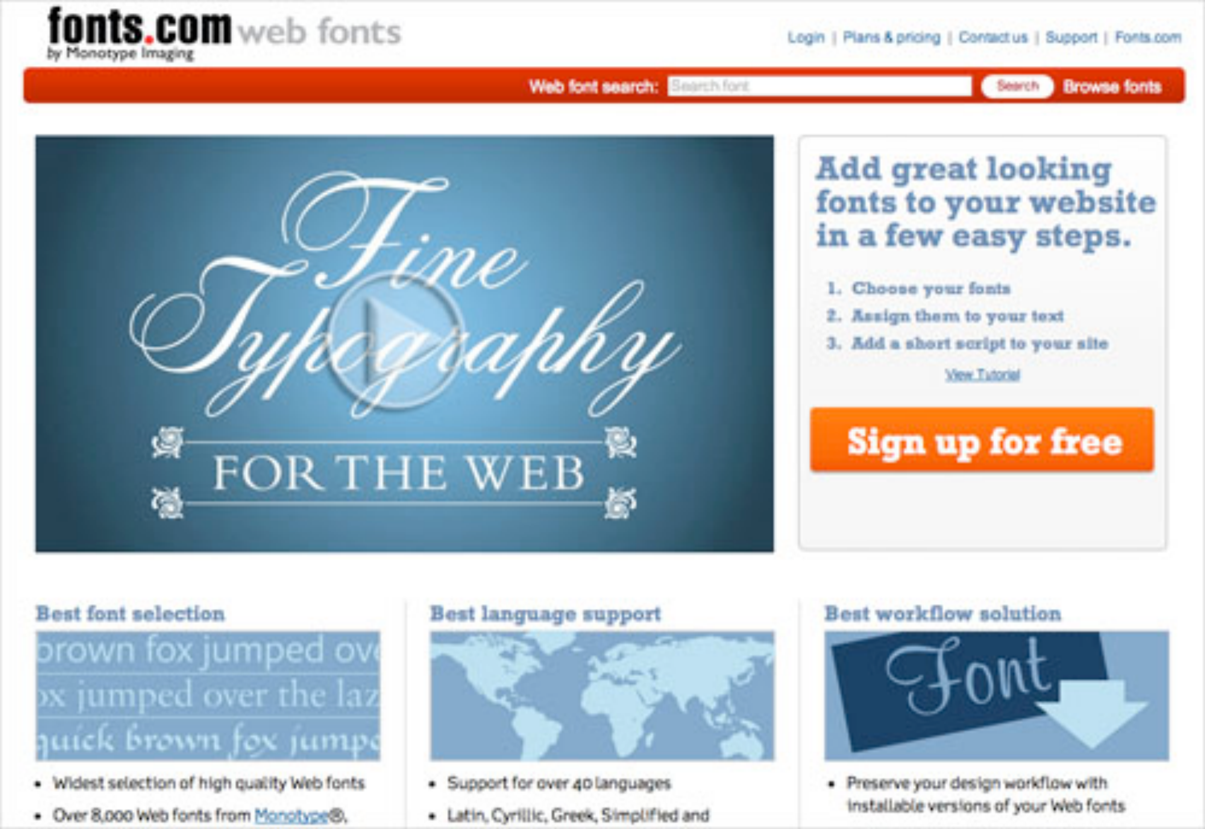
Because these are self-hosted files, it's a bit harder to get everything set up properly than it is with the other services here. When you purchase and download a font that includes an `@font-face` licence, the download package includes all the files you'll need for web implementation, including the various font file formats like EOT and WOFF.

I found it easier to just copy and paste the stylesheet information included into the existing site's stylesheet. Once that's done, you need to make sure your fonts are loaded into the same folder as your stylesheet (or change the URL information in the CSS). Add the font to your font stack and you're ready to go.

The speed at which the fonts loaded was roughly the same as for most of the other services here. The advantage to using this service is that you own a permanent licence to the fonts, without any recurring annual fees and with no restrictions on bandwidth or traffic.

Fonts.com Web Fonts

Web fonts from Fonts.com is a new venture from Monotype Imaging, the largest font distributor on the web. Fonts.com currently has, by far, the largest web font selection with more than 7,500 fonts.



Add great looking fonts to your website in a few easy steps.

1. Choose your fonts
2. Assign them to your text
3. Add a short script to your site

- Widest selection of high quality Web fonts
- Over 8,000 Web fonts from Monotype®,

- Support for over 40 languages
- Latin, Cyrillic, Greek, Simplified and

- Preserve your design workflow with installable versions of your Web fonts

Font Selection

7,500+

Advantage Over Other Services

Large Font selection

Pros

Currently the largest selection of fonts on the web. Exclusive home to popular fonts like Helvetica, Frutiger and Univers. Support for more than 40 languages. Use on unlimited domains. Download up to 50 desktop fonts per month with the Professional plan. JavaScript-free integration available to Standard and Professional subscribers.

Cons

Relatively expensive on a price-per-font basis when using a limited number of web fonts. The font selection interface is slower than average.

Pricing

Various tiers ranging from free up to $500/month. With a free tier, you have the ability to use any of 2000 fonts on an unlimited number of Web sites (up to 25,000 page views). Standard and Pro tiers will give you access to any of over 7,000 fonts. All pricing is dependent upon page views.

Fee Schedule

30 days

Our Experience with Fonts.com Web Fonts

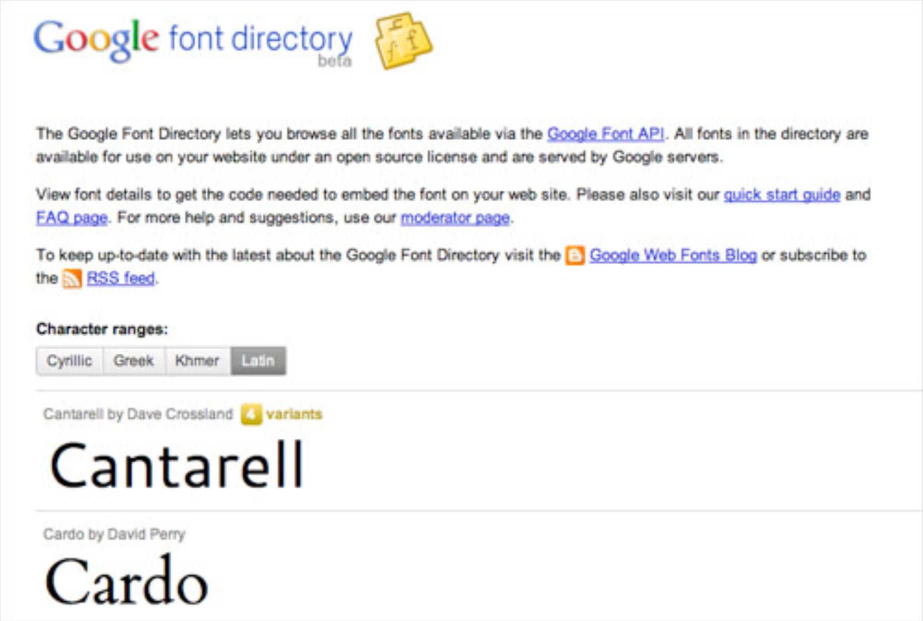
The service looks pretty straightforward. You set up a project with as many domains as you want and then select the fonts you want to use for that project. Selecting fonts is a bit slow (it takes 30 seconds or more for a font to actually be added to a project), but not enough to be prohibitive. There's a huge selection of fonts and powerful tools for sorting through them, in addition to search capability.

From there, you have to enter each CSS selector for which you would like to use a web font and select the font used for that particular selector using a drop down menu that lists the fonts you already selected for the project. One place where Fonts.com really stands out is in the options you have for publishing your new web fonts. There are two different JavaScript options — an "Easy" option and an "Advanced" one — that let you add the fonts to selectors directly in your stylesheet rather than just through the web interface, as well as two non-JS options (also "Easy" and "Advanced").

Again, the Fonts.com site was a bit slow overall but the end result is just as fast and seamless as any other service listed here.

Google Fonts

Google Fonts, announced last May, represents Google's foray into web fonts. Google offers the service free of charge. Although the selection is currently limited to certain public domain fonts, it has the potential to have a significant impact on the future of web fonts.



The Google Font Directory lets you browse all the fonts available via the Google Font API. All fonts in the directory are available for use on your website under an open source license and are served by Google servers.

View font details to get the code needed to embed the font on your web site. Please also visit our quick start guide and FAQ page. For more help and suggestions, use our moderator page.

To keep up-to-date with the latest about the Google Font Directory visit the Google Web Fonts Blog or subscribe to the RSS feed.

Character ranges:

Cantarell by Dave Crossland 4 variants

Cantarell

Cardo by David Perry

Cardo

Font Selection
60 (including international fonts)

Advantage Over Other Services
Free

Pros

Easy to implement. Fast font loading. Google's WebFont Loader lets you use their service with multiple web font providers.

Cons

Small font selection in the Google font directory. Now with support for iPhone and iPad (Mobile Safari).

Pricing

Free

Fee Schedule

N/A

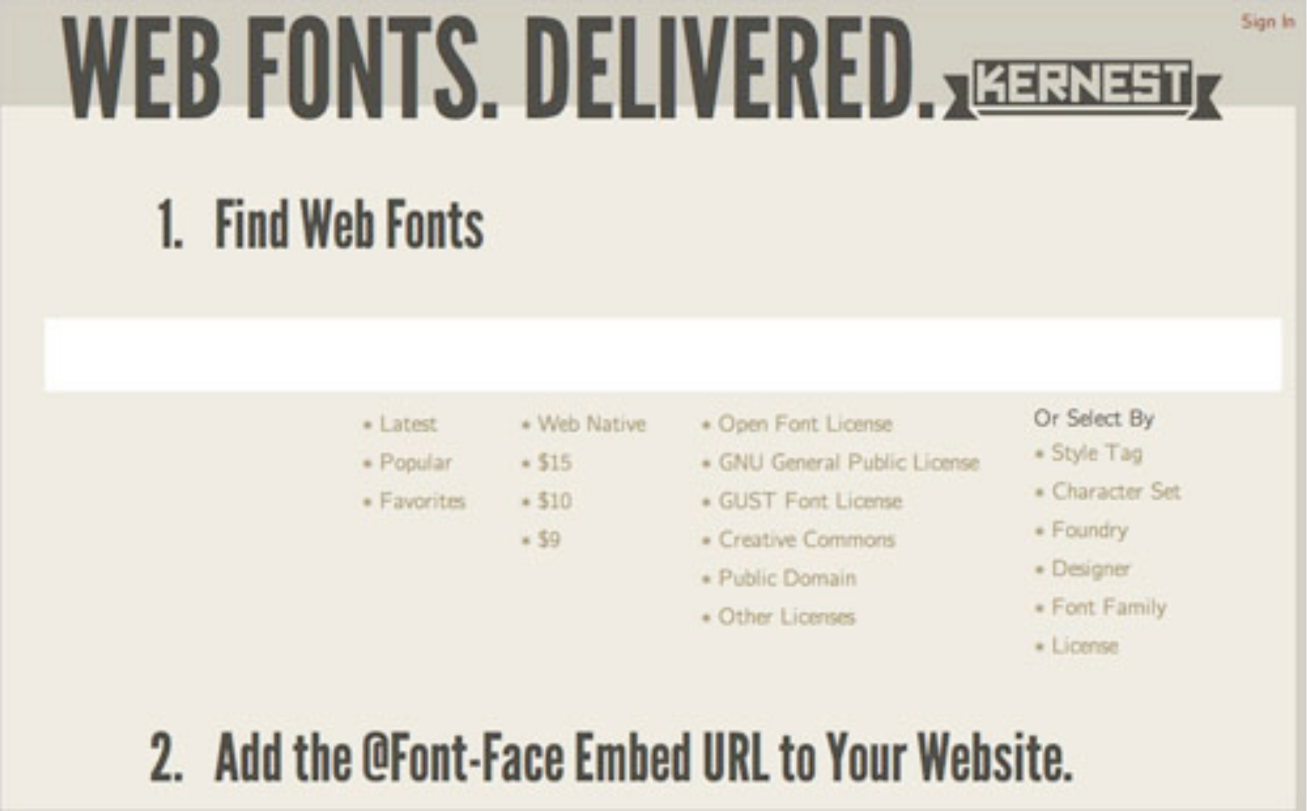
Our Experience with Google Fonts

The Google Fonts API is probably the easiest of the services listed here to get started with, mostly because there is no sign-up process. You simply browse the fonts they offer, select one, and then get the code. Link the stylesheet in your Web site's head, and then add the font to the font stack in your stylesheet.

The service is very fast, with only a barely noticeable lag before loading the proper font. The fact that there are no limits on usage of the service puts it among the top contenders on this list. The only major drawback is the limited number of fonts available.

Kernest

Kernest is a hosted or self-hosted (you can also use Fontue, Kernest's open source web font serving engine) web font tool that converts fonts into web font ready formats along with sample code.



Sign In

WEB FONTS. DELIVERED. KERNEST

1. Find Web Fonts

- Latest
- Popular
- Favorites

- Web Native
- $15
- $10
- $9

- Open Font License
- GNU General Public License
- GUST Font License
- Creative Commons
- Public Domain
- Other Licenses

Or Select By
- Style Tag
- Character Set
- Foundry
- Designer
- Font Family
- License

2. Add the @Font-Face Embed URL to Your Website.

Font Selection

2,450

Advantage Over Other Services

Most fonts are free

Pros

Open source web font serving engine. Large font selection.

Cons

Self-hosting only, which requires additional setup and technical skills

Pricing

Free or up to $15

Fee Schedule

One-time fee

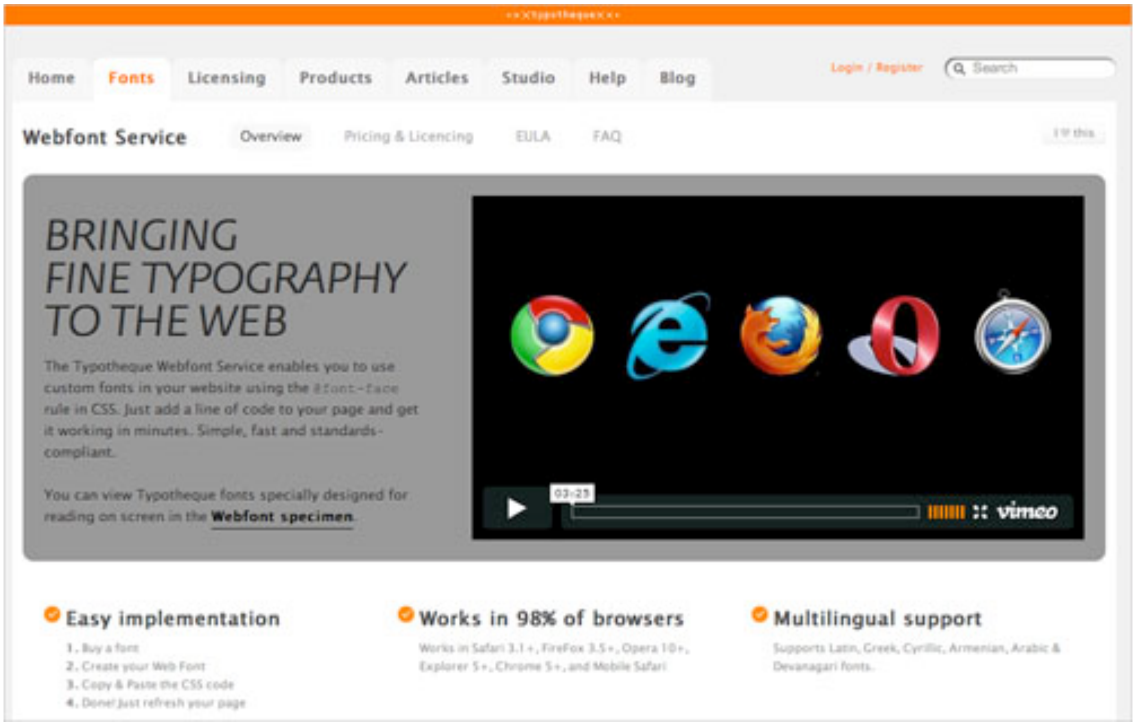
Our Experience with Kernest

Kernest has a great selection of free and paid fonts available. Free fonts could be set up without having to sign up for an account. Just find the font you want to use, make sure the permissions are acceptable for your intended use (not every font is allowed to be used on commercial sites, for example), and then copy and paste the link and CSS code into your files.

Kernest works as well as any of the others on this site, with minimal lag time before the fonts load.

Typotheque

Typotheque is a graphic design studio and type foundry located in the Netherlands. Their hosted web font service includes a relatively small selection of Typotheque fonts. Typotheque was the first foundry to start its own web font service, and all fonts are designed in-house.



BRINGING
FINE TYPOGRAPHY
TO THE WEB

The Typotheque Webfont Service enables you to use custom fonts in your website using the @font-face rule in CSS. Just add a line of code to your page and get it working in minutes. Simple, fast and standards-compliant.

You can view Typotheque fonts specially designed for reading on screen in the **Webfont specimen**.

Easy implementation

1. Buy a font
2. Create your Web Font
3. Copy & Paste the CSS code
4. Done! Just refresh your page

Works in 98% of browsers

Works in Safari 3.1+, FireFox 3.5+, Opera 10+, Explorer 5+, Chrome 5+, and Mobile Safari

Multilingual support

Supports Latin, Greek, Cyrillic, Armenian, Arabic & Devanagari fonts.

Font Selection

37 font families, many supporting various styles and languages; this means there are over 500 single fonts.

Advantage Over Other Services

Use on unlimited Web sites

Pros

Option to purchase a full (web and desktop) licence. Over 250 languages supported, and from those up to 5 languages can be embedded. All fonts are exclusive to and designed by Typotheque. Offers self-hosting for large Web sites.

Cons

Limited font selection (although this is only true because their fonts are exclusive) and monthly bandwidth (500MB for each font within a font family).

Pricing
20% of the full desktop licence (ex. Fedra Sans Std Book: Full @ €90, Web @ €18). Includes 500MB monthly bandwidth.

Fee Schedule
One-time fee (€5 for every extra GB over 500MB)

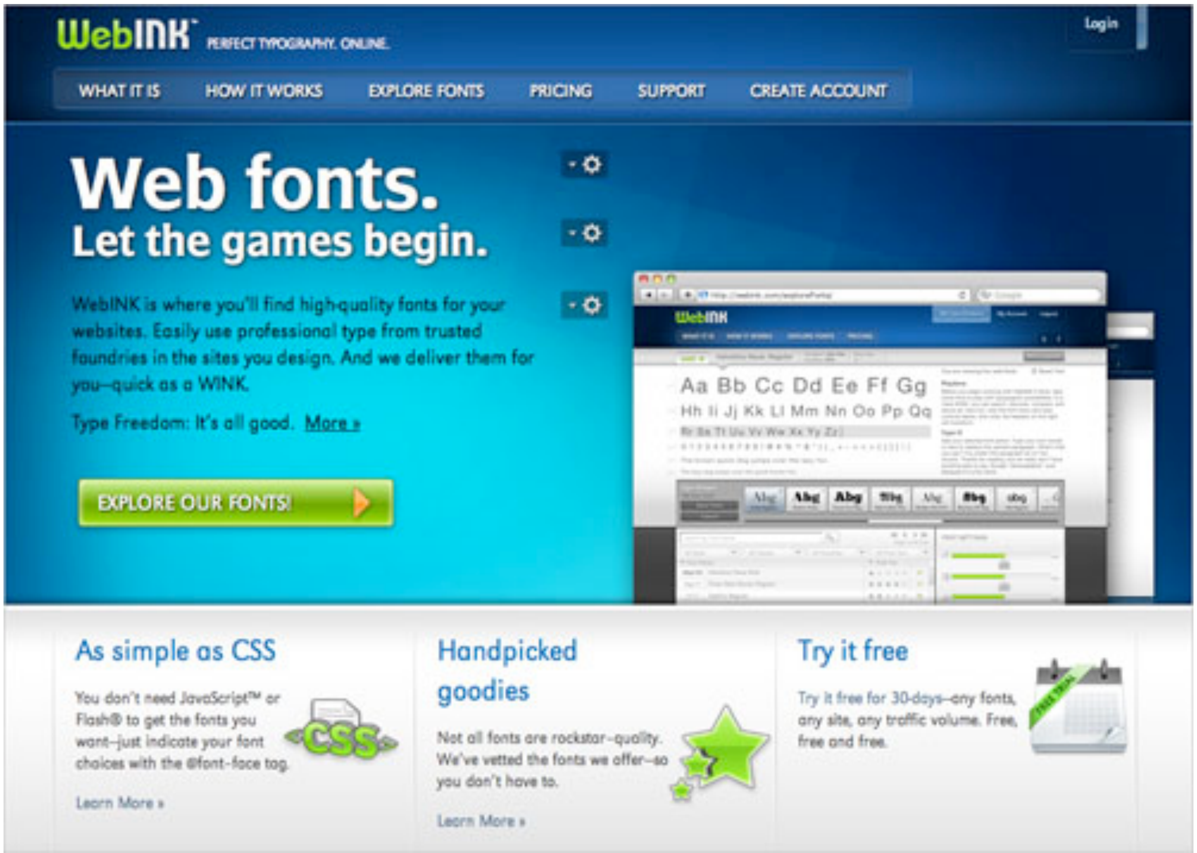
Our Experience with Typotheque

Setup is similar to the other services listed here. Just select the font you want to use and the domains on which it will be used, add the stylesheet link to the head of your page, add the font to your font stacks, and you're ready to go. Lag time for the font to load is comparable to the other services. The biggest drawback is the lack of font selection, but as mentioned, this is due to the fact that their fonts are exclusive to Typotheque.

The service did return an error when generating the font subset, but it appeared to work fine, so not sure if that's a bug or if there would actually be problems after more extensive testing.

WebINK

WebINK is a hosted web font platform developed by Extensis, a software development company based out of Portland, Oregon and specializing in font management.



Web fonts.
Let the games begin.

WebINK is where you'll find high-quality fonts for your websites. Easily use professional type from trusted foundries in the sites you design. And we deliver them for you—quick as a WINK.

Type Freedom: It's all good. More »

As simple as CSS

You don't need JavaScript™ or Flash® to get the fonts you want—just indicate your font choices with the @font-face tag.

Learn More »

Handpicked goodies

Not all fonts are rockstar-quality. We've vetted the fonts we offer—so you don't have to.

Learn More »

Try it free

Try it free for 30-days—any fonts, any site, any traffic volume. Free, free and free.

Font Selection:
2,000

Advantage Over Other Services
Can be affordable for the right type of user

Pros
Affordable pricing structure (similar to Typekit). Decent selection of fonts. Offers access both through the usual web interface, or alternatively through a desktop font management application called Suitcase Fusion 3 (Mac and Windows). This application has a live Web site preview mode for testing different fonts, and something called QuickMatch that finds the closest match to the chosen font on your computer.

Cons

Confusing interface and back-end. Each plan is limited to 4 Web sites (Note: Each user can set up as many "Type Drawers" as they want, allowing 4 Web sites per Type Drawer; so really the number of Web sites is only limited to an individual plan within a single user account, whereas the number of Type Drawers is unlimited).

Pricing

Free 30-day trial on all fonts. Packages start at $0.99 per month (only includes "Promotional" font selection) for 1GB usage and up to 4 Web sites.

Fee Schedule

Monthly subscription

Our Experience with WebINK

We only tested the web interface for WebINK, not Suitcase Fusion 3. The WebINK online interface is probably more confusing than the others listed here. The service allows you to create an unlimited amount of Type Drawers to hold the fonts for your different projects. To add fonts from the library into your Type Drawers, you need to click the "add fonts" button within a specific Drawer. Going directly to the font library will not allow you to have direct access to your Drawers, so this takes some getting used to.

Once you get the fonts you want into your Type Drawer, setting them up on your Web site requires adding the `@font-face` information to your stylesheet and placing the fonts into your font stacks. The speed at which the font loads on the site is about the same as any other service.

Font-Face

Font-Face recently scrapped its project after the recent Google Font announcement. However, according to their Web site, they are “hatching a new plan” so we may hear more from them yet.

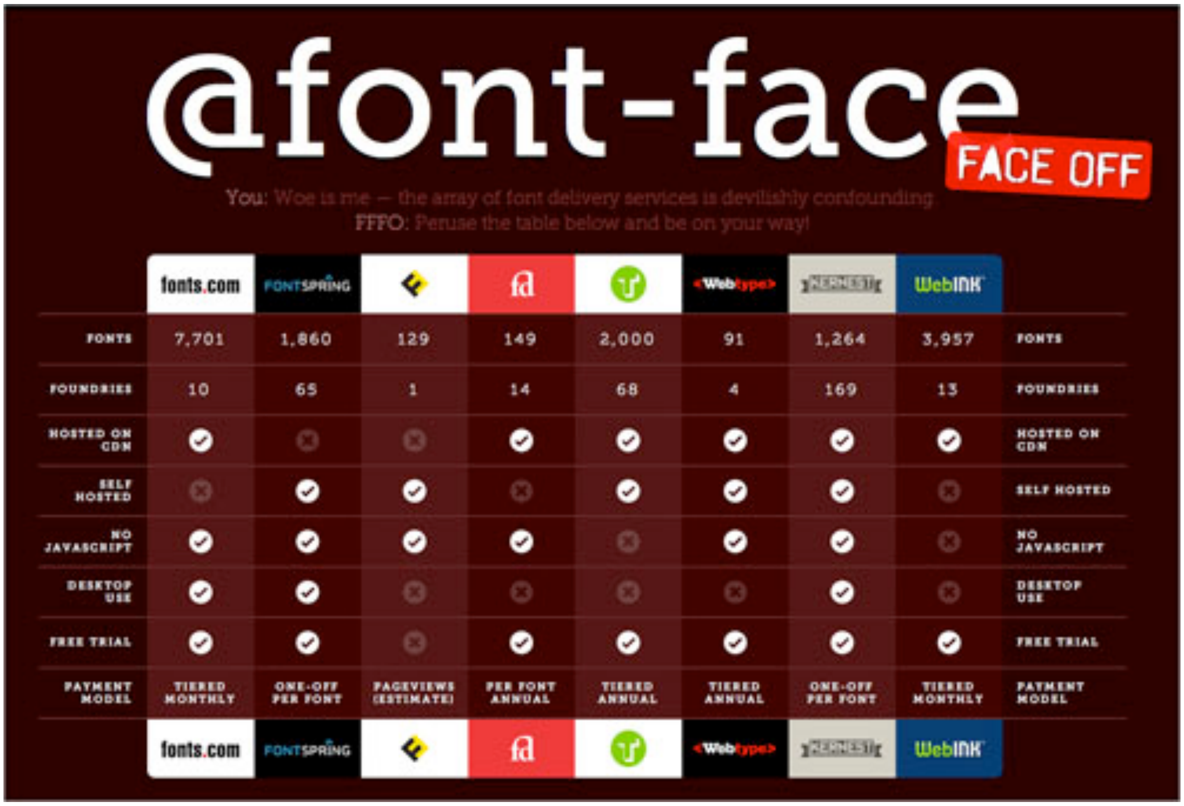
Google
ANNOUNCEMENT
WHAT IS @font-face {}
HOW DO I USE @font-face {}
WHAT'S THE PLAN @font-face {}
HOW CAN I HELP @font-face {}

How to Choose a Service

There is no “right” answer when it comes to choosing a web font service. Selecting the proper service usually depends on what you or your client need. The following questions might help assess your needs:

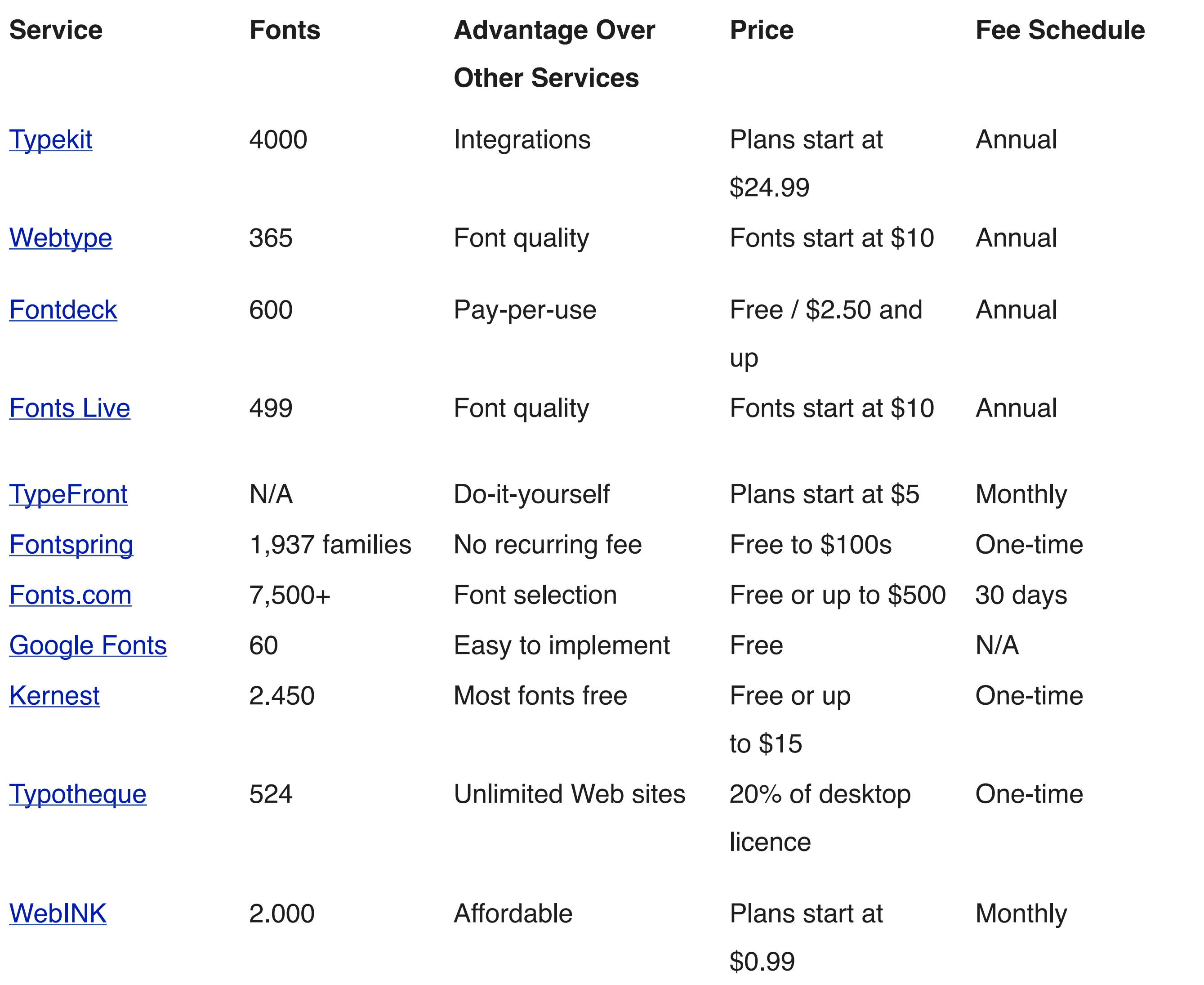
- How important is font selection? Are there specific fonts you need?
- How important is font quality to you and your clients?
- Do you require a self-hosting option?
- Do you or your client have a budget? What type of fee structure would be ideal?
- Is iPhone and iPad (Mobile Safari) support important?

Based on your answers to these questions you should be able to use the quick comparison chart below, along with the more detailed information above, to make an informed decision, or at the very least find a few starting points to start digging deeper (also be sure to check out the great chart @font-face face off).



@font-face
FACE OFF
You: Woe is me — the array of font delivery services is devilishly confounding
FFFO: Peruse the table below and be on your way!

	fonts.com	FONTSPRING		fd		Webtype	KERNEST	WebINK	
FONTS	7,701	1,860	129	149	2,000	91	1,264	3,957	FONTS
FOUNDRIES	10	65	1	14	68	4	169	13	FOUNDRIES
HOSTED ON CDN	✓	✗	✗	✓	✓	✓	✓	✓	HOSTED ON CDN
SELF HOSTED	✗	✓	✓	✗	✓	✓	✓	✗	SELF HOSTED
NO JAVASCRIPT	✓	✓	✓	✓	✗	✓	✓	✗	NO JAVASCRIPT
DESKTOP USE	✓	✓	✗	✗	✗	✗	✓	✗	DESKTOP USE
FREE TRIAL	✓	✓	✗	✓	✓	✓	✓	✓	FREE TRIAL
PAYMENT MODEL	TIERED MONTHLY	ONE-OFF PER FONT	PAGEVIEWS (ESTIMATE)	PER FONT ANNUAL	TIERED ANNUAL	TIERED ANNUAL	ONE-OFF PER FONT	TIERED MONTHLY	PAYMENT MODEL
	fonts.com	FONTSPRING		fd		Webtype	KERNEST	WebINK	



Service	Fonts	Advantage Over Other Services	Price	Fee Schedule
Typekit	4000	Integrations	Plans start at $24.99	Annual
Webtype	365	Font quality	Fonts start at $10	Annual
Fontdeck	600	Pay-per-use	Free / $2.50 and up	Annual
Fonts Live	499	Font quality	Fonts start at $10	Annual
TypeFront	N/A	Do-it-yourself	Plans start at $5	Monthly
Fontspring	1,937 families	No recurring fee	Free to $100s	One-time
Fonts.com	7,500+	Font selection	Free or up to $500	30 days
Google Fonts	60	Easy to implement	Free	N/A
Kernest	2.450	Most fonts free	Free or up to $15	One-time
Typotheque	524	Unlimited Web sites	20% of desktop licence	One-time
WebINK	2.000	Affordable	Plans start at $0.99	Monthly

Quick Overview of the services reviewed in this article

Summary

Web font services, like any relatively new popular technology, are complex and rapidly proliferating. While there is no “perfect” service, it’s promising to see such a wide variety of companies entering the industry and continually raising the bar for web fonts.

How to Embed Web Fonts from your Server

Ralf Hermann

You don’t necessarily have to rent or licence fonts for use on web pages. You can also pimp your already licenced desktop fonts for cross-browser web font embedding and upload the fonts to your own web server.

Fonts to Choose and Fonts to Avoid

Before you start converting your desktop fonts into web fonts, make sure that the licence with the respective font entitles you to do so. Generally, commercial licence agreements do not permit the storing of font software on a publicly accessible web server. This, however, is a prerequisite when using the `@font-face` rule.

Currently, commercial font providers count on web font embedding services. Only a few suppliers deliver special web font packages for storage on the customer’s own web server, among them FSI FontShop International and Fontspring.

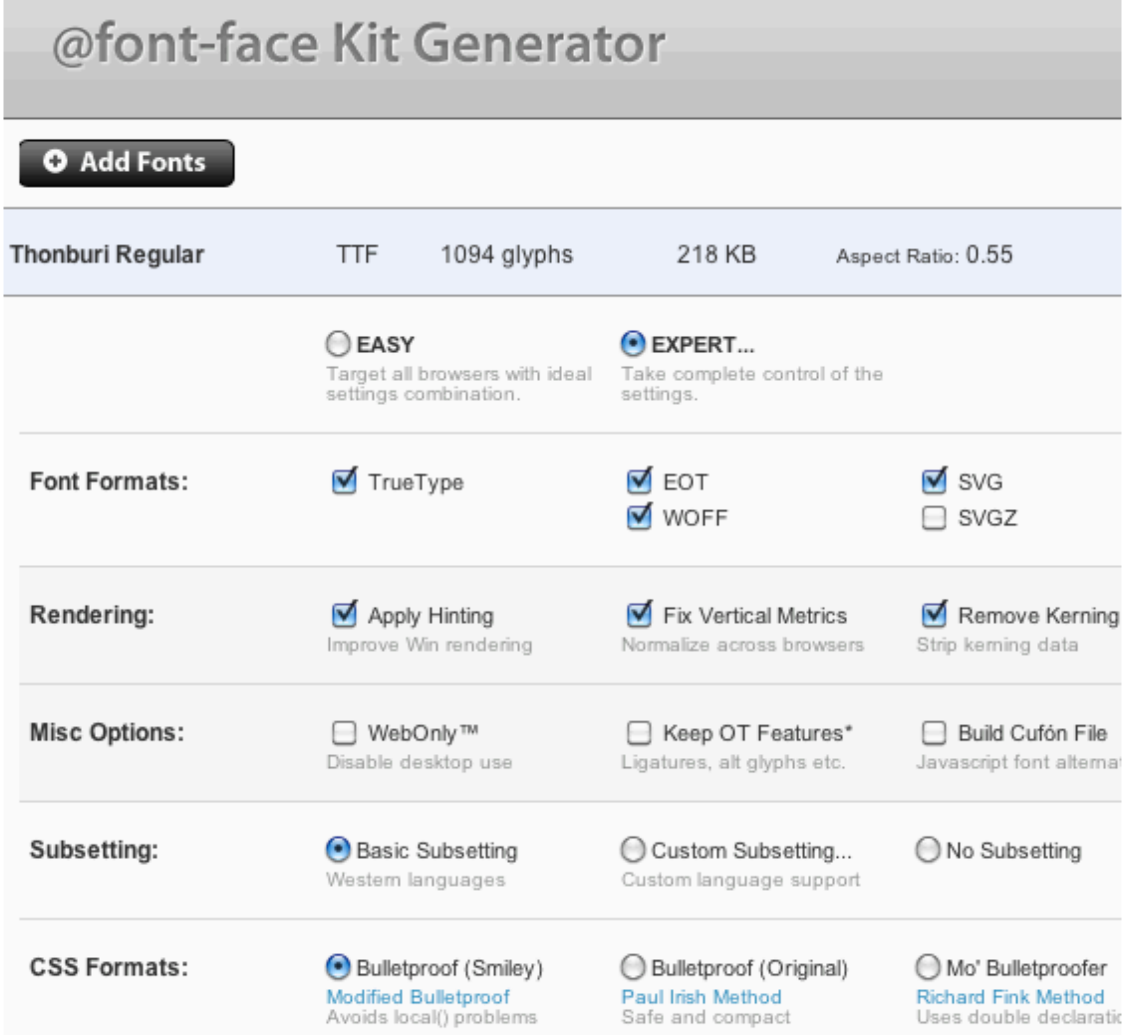
Once the web Open Font Format (WOFF) is accepted as a standard more font vendors might offer this service.

Embedding Free and Open-Source Fonts

Besides commercial fonts there’s a wide variety of freeware and open source fonts which you can embed in your web pages. A list with suitable fonts that are definitely free for use via @font-face embedding can be found on webfonts.info.

Another huge collection of such fonts is offered by fontsquirrel.com. Furthermore, FONTSQUIRREL is the best address when it comes to converting desktop fonts into web font formats as it offers a powerful tool, the @font-face Kit Generator.

Please note that the fonts you want to convert have to be legally eligible for web font embedding!



@font-face Kit Generator

Add Fonts

Thonburi Regular TTF 1094 glyphs 218 KB Aspect Ratio: 0.55

○ EASY — Target all browsers with ideal settings combination.
● EXPERT... — Take complete control of the settings.

Font Formats:	☑ TrueType	☑ EOT ☑ WOFF	☑ SVG □ SVGZ
Rendering:	☑ Apply Hinting Improve Win rendering	☑ Fix Vertical Metrics Normalize across browsers	☑ Remove Kerning Strip kerning data
Misc Options:	□ WebOnly™ Disable desktop use	□ Keep OT Features* Ligatures, alt glyphs etc.	□ Build Cufón File Javascript font alterna
Subsetting:	● Basic Subsetting Western languages	○ Custom Subsetting... Custom language support	○ No Subsetting
CSS Formats:	● Bulletproof (Smiley) Modified Bulletproof Avoids local() problems	○ Bulletproof (Original) Paul Irish Method Safe and compact	○ Mo' Bulletproofer Richard Fink Method Uses double declaratic

Creating web fonts made easy by Font Squirrel's generator.

Using the @font face Kit Generator

For a practical test you might download the font package Graublau Sans Web. This font package offers a PostScript-based OpenType font that can actually be used on Safari 3.1 or higher, Firefox 3.5 or higher and Opera 10 or higher without any changes.

In order to provide browser support for Internet Explorer and improve the screen display we'll set the @font-face Kit Generator to work. Click the **Add Fonts** button and upload the respective font with all its weights. Choose the **Expert** radio button and check all the necessary options which we'll go through in more detail now.

Font Formats

You have to activate **EOT** in order to obtain @font-face support on Internet Explorer (IE4 to IE8). Since IE9, WOFF is supported as well. SVG fonts will mainly be needed for Mobile Safari on the iPhone and iPad, although Chrome and Opera can handle this format as well. Alternatively or rather in addition to **SVG** there's the compressed version **SVGZ**, which offers a much smaller file size. Unfortunately, it doesn't run on the iPhone so you'll need the SVG font anyway.

Creating a **TrueType** font format will allow for support in Safari (since 3.1), Firefox (since 3.5) and Opera (since 10). Please note that this generator won't create compressed EOT files. As a workaround **you can optimize the file size** by means of the tool EOTFast.

Checking the WOFF option won't increase browser support these days, but it sure will in the near future, when WOFF has become the standard web font format.

Rendering and Miscellaneous Options

The option **Add Hinting** offers improved font display in Windows. You should only uncheck it, if you are absolutely positive that the respective fonts are screen-optimized already.

WebOnly™ adds specific modifications which allow browsers to use the modified fonts but avoid installation of these fonts on common operating systems. Checking this option helps to avoid unintended pirate copies.

Desktop fonts may have a number of OpenType functions. As there's little browser support for these functions today, you might want to remove them with this option (**rendering and miscellaneous options**). In order to keep some of the standard, i.e. already supported OpenType functions such as ligatures, you can activated the option **Keep OT Features**.

Another possibility to reduce the file size is by checking the option **Remove Kerning** which will erase all kerning values that are contained for specific letter combinations. In case you are going to use the font for body text this option is actually recommendable. For headlines it should be handled with care or not be done at all as the missing kerning values might lead to the unpleasant effect that the shape of words looks like a Swiss cheese.

The option **Simplify Outlines** does exactly that: it tries to simplify the outline of characters. As this option reduces the quality of screen display it is not advisable to use it.

Then, there's the option **Build Cufón File** that isn't directly part of the options for @font-face embedding. How Cufón works is explained in a separate article in this e-book. For further details you can also check the Cufón Web site.

Subsetting

Subsetting means that all superfluous characters are removed. Whether or not this is actually necessary depends on the respective font. Some fonts can easily contain thousands of characters of various writing systems which bloats the font file considerably. Without subsetting such fonts are not suitable for use as web fonts.

The option **Basic Subsetting** is set as default and offers the usual Western European glyph allocation based on the character set MacRoman. **Custom Subsetting …** allows for a custom defined scope of contained characters and glyphs. Whereas, the option **No Subsetting** deactivates subsetting completely and converts the font with all contained characters and glyphs.

CSS-Formats

The @font-face Kit Generator creates both the converted fonts and the matching CSS files which is really helpful for web designers as the CSS code can be voluminous, when several fonts with various font formats are involved.

You can choose from three different versions:

- Mo' Bulletproofer
- Bulletproof (Original)
- Bulletproof (Smiley)"

A correct syntax is key for proper registration of the fonts and in order to prevent browsers from loading font formats they don't support. Each of the above-mentioned versions solves a different browser specific problems. In addition, the smiley version guarantees that the embedded font won’t be replaced by one of the locally installed versions of the font.

CSS Options

The option **Style Linking** groups styles by family. This allows for addressing the fonts later through the CSS properties `font weight` and `font-style`.

This option will only work properly, if the font family doesn’t contain more than the common four styles, i.e. regular, italic, bold and bold italic. Otherwhise, you should leave the option unchecked so that fonts can be addressed by independent family names. Last but not least, the option **Base64 Encode** embeds web fonts with a base64 encoding into the CSS code instead of creating a separate font file. As a result the fonts don’t appear as font files in the browser’s cache.

Code Sample

The following example illustrates what your CSS code for @font-face embedding might look like:

```
@font-face {
font-family: ‘GraublauWeb’;
src: url(’graublauwebbold-webfont.eot’);
src: local(’☺’),url(’graublauwebbold-webfont.woff’) format(’woff’),
url(’graublauwebbold-webfont.ttf’) format(’truetype’),
url(’graublauwebbold-webfont.svg#webfontDGhCBjc5’) format(’svg’);
font-weight: bold;
font-style: normal;
}
```

The **EOT file** for Internet Explorer **is always loaded first** and has to be without the `format` attribute.

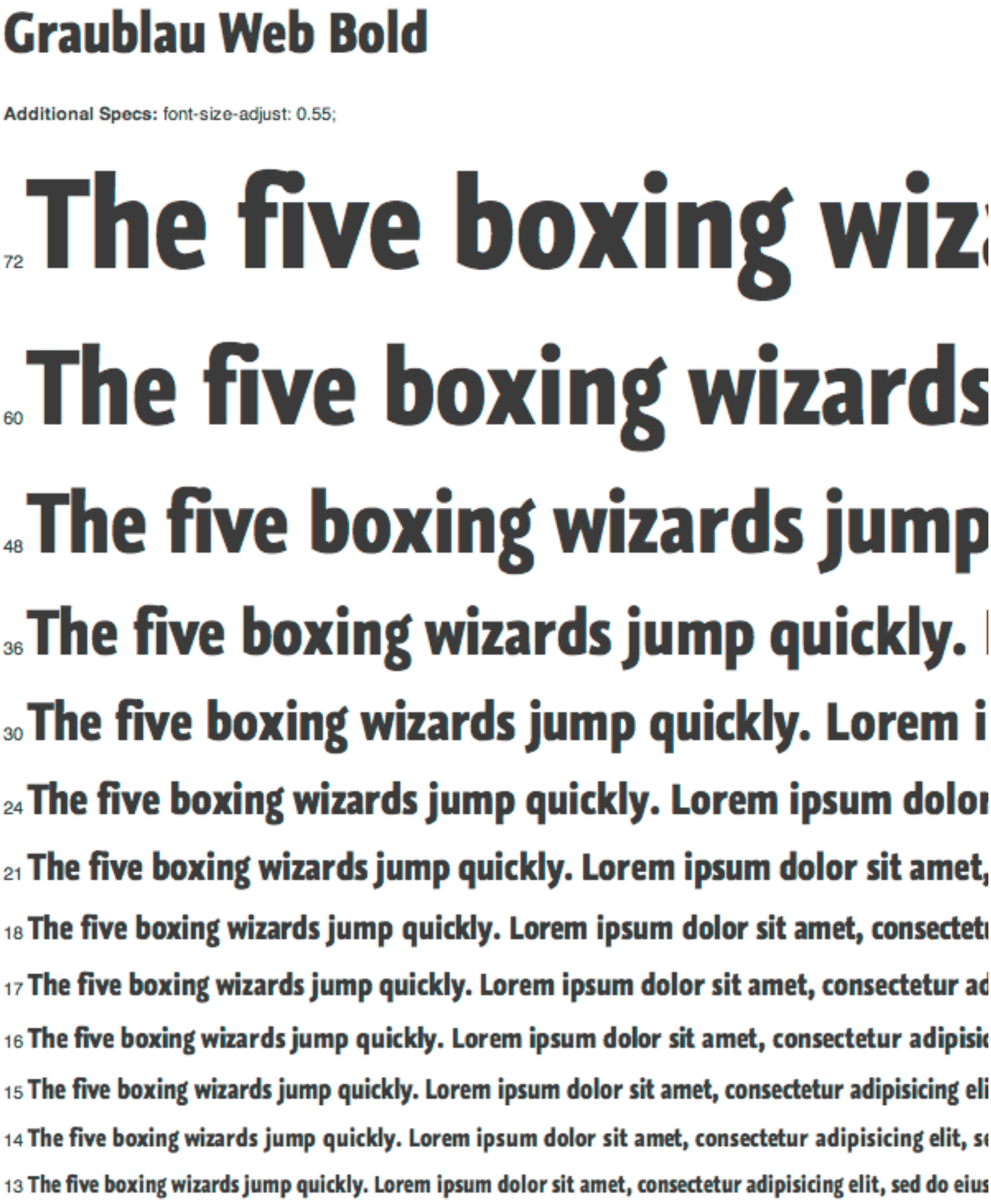
The other font formats are specified in a comma-separated list and are hid from Internet Explorer by the introductory `local` attribute. The SVG specification contains an additional hash tag as a unique identification number. This is necessary as SVG files may contain several fonts. However, the @font-face generator takes care of the identification number and its embedding into the CSS code by automatically.

Loading Time Increases with Amount of Fonts

By means of the above-mentioned options, file sizes of web fonts can be reduced to approximately 30 to 60 kilobytes. Larger font files or too many fonts on one web page can slow down loading of the page, especially on mobile devices.

Weird Interim Solution in Firefox

Most browsers won't show any text before all web fonts are imported. Firefox, however, displays the text using a system font and renders the text again, when the embedded web fonts are completely loaded. This technique results in a „**flash of unstyled text“** that sometimes leads to side-effects



Graublau Web Bold

Additional Specs: font-size-adjust: 0.55;

72 The five boxing wiz

60 The five boxing wizards

48 The five boxing wizards jump

36 The five boxing wizards jump quickly.

30 The five boxing wizards jump quickly. Lorem i

24 The five boxing wizards jump quickly. Lorem ipsum dolor

21 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet,

18 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet, consectet

17 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet, consectetur ad

16 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet, consectetur adipisic

15 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet, consectetur adipisicing eli

14 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet, consectetur adipisicing elit, s

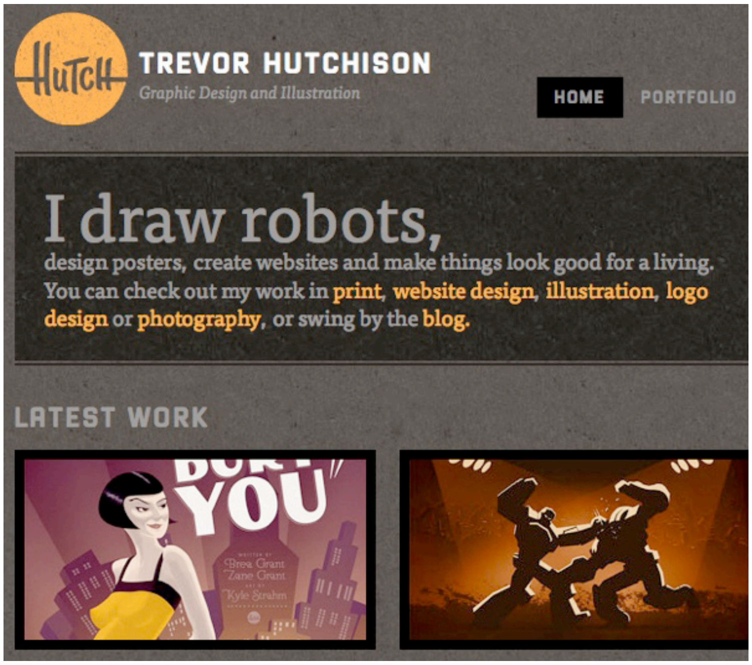
13 The five boxing wizards jump quickly. Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eius

The result of the above process looks like this in Safari on Mac OS X.

Web Typography – Work-arounds, Tips and Tricks

Ralf Hermann

The possibilities of using custom fonts on web pages developed much quicker over the past two years than anybody expected. Today web designers still have to struggle with a clutter of font formats in order to provide for cross-browser support of a given font. However, this problem will subside as soon as the web Open Font Format (WOFF) is established as the standard web font format.



I draw robots,
design posters, create websites and make things look good for a living. You can check out my work in print, website design, illustration, logo design or photography, or swing by the blog.

Typographic variety beyond the monotony of system fonts.

Another obstacle is the prevalence of Windows computers with deactivated subpixel rendering — either by default on Windows XP or on purpose by their users. Compared to system fonts most web fonts are displayed at a much lower quality in screen display without subpixel rendering. Time will solve this problem, when users replace their equipment with new hardware and current operating systems. Furthermore, Internet Explorer 9 will work with the text engine DirectWrite that provides a significantly improved rendering.

Using web fonts for your design entails thorough testing on as many different browsers and platforms as possible with a close look at the **various options of rendering text**. If the screen display is of poor quality without subpixel rendering you might want to opt for graceful degradation and deliver system fonts for users of older browsers and systems. The easiest way to exclude older browsers or operating systems from style sheets with embedded web fonts is the use of conditional comments. Of course, using JavaScript is the more elegant way to detect whether or not the client's subpixel rendering is turned on or off.

Text Layout

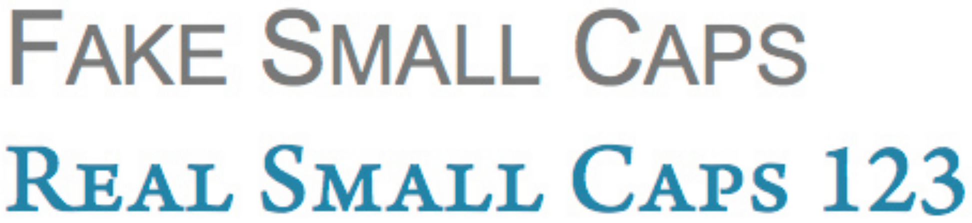
Even though some web layouts are drawing nearer to print layouts thanks to rich typography and web font embedding there's still a big difference: To this day browsers do not offer automatic **hyphenation**. Especially for languages with very long words, e.g. German, it is not possible to use left and right **justified text** without creating spacious gaps thus reducing the readability of body text.

By means of JavaScript you can provide for a language-based client-side hyphenation. A server-side solution is offered by phpHyphenator. Nevertheless, these are still emergency solutions for a missing function that should be an integral part of any browser which it will hopefully be in the future.

OpenType Typography Features

With the spreading of web fonts another shortcoming of common browsers concerning text layout came into focus – there's no support of OpenType typographic features that have been offered by high-end desktop publishing programs such as InDesign or QuarkXPress since version 7.

OpenType functions add several smart font options that enhance the font's typographic and language support capabilities. If the application supports these options, characters can be replaced by additional features automatically. For Latin-based script these mainly concern ligatures, fractions or small capitals.

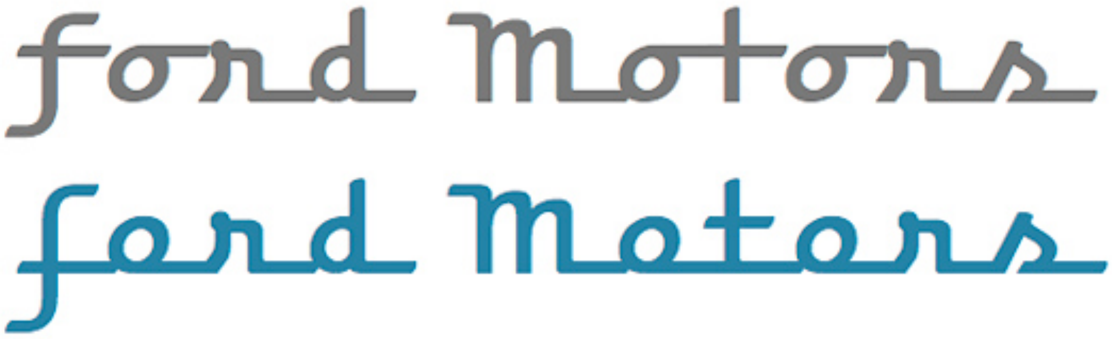


FAKE SMALL CAPS

REAL SMALL CAPS 123

Computer generated small caps (grey lettering on top) and true small caps (blue lettering below) in the beta version of Firefox 4.

Some fonts can only be put to use by OpenType functions in the first place. Take joint Latin handwriting or Arabic writing for example, in which the shape of a character depends on its position in the word and the adjacent characters. Comprehensive OpenType fonts may, therefore, contain various alternative glyphs for the respective character. With the methods of OpenType functions, the basic version of a character is replaced by a version with matching connections context-based as the following screen shot illustrates.



Perfect junction of characters (blue lettering below) thanks to context-based replacement in Firefox 4.

The current beta version of Firefox 4 offers access to this OpenType feature for the first time. For the time being it can be defined with this browser specific attribute:

```
h1 {
-moz-font-feature-settings:’smcp=1′;
}
```

This example will display the headline in true small caps provided that the font does have a small-caps case. A list with common OpenType features can be found at [Microsoft’s]() Web site.

So far, there are no standards to address these features in your CSS style sheets, but the CSS Fonts Module Level 3 draft mentions this possibility already. Other browser companies will most likely follow this example sooner or later.

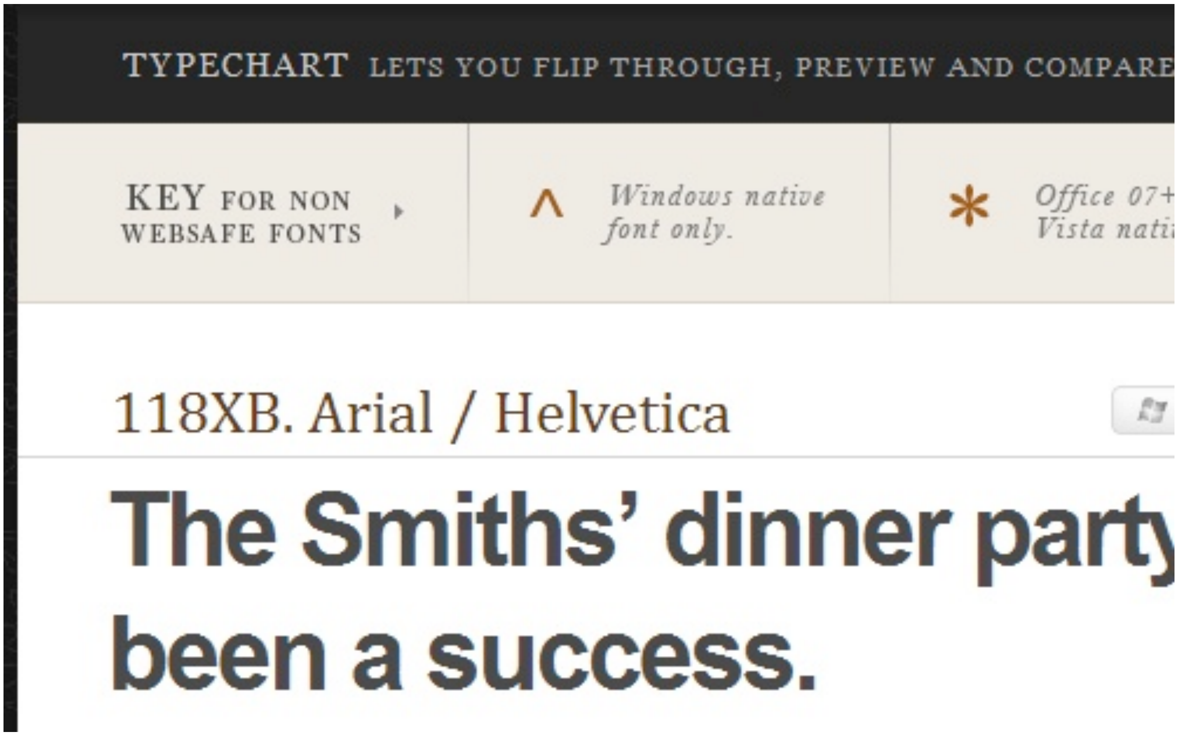
Browser developers still have a long way to go until the web can catch up with text layout in print design or even overtake it. It‘s, however, good to know that there is a growing awareness for such typographic subtleties among browser manufacturers so that further progress can be expected pretty soon.

10 Useful Typography Tools

Vitaly Friedman / Manuela Müller

Typechart – Previewing and Comparing Web Typography

Typechart lets you flip through, preview and compare web typography while retrieving the CSS. You can browse different typographic styles. Each style corresponds to a style ID, which allows you to annotate prototypes and retrieve the CSS while coding. Another useful feature is that you can compare Windows (ClearType) rendering with Apple font rendering.



TYPECHART LETS YOU FLIP THROUGH, PREVIEW AND COMPARE

KEY FOR NON WEBSAFE FONTS

^ Windows native font only.

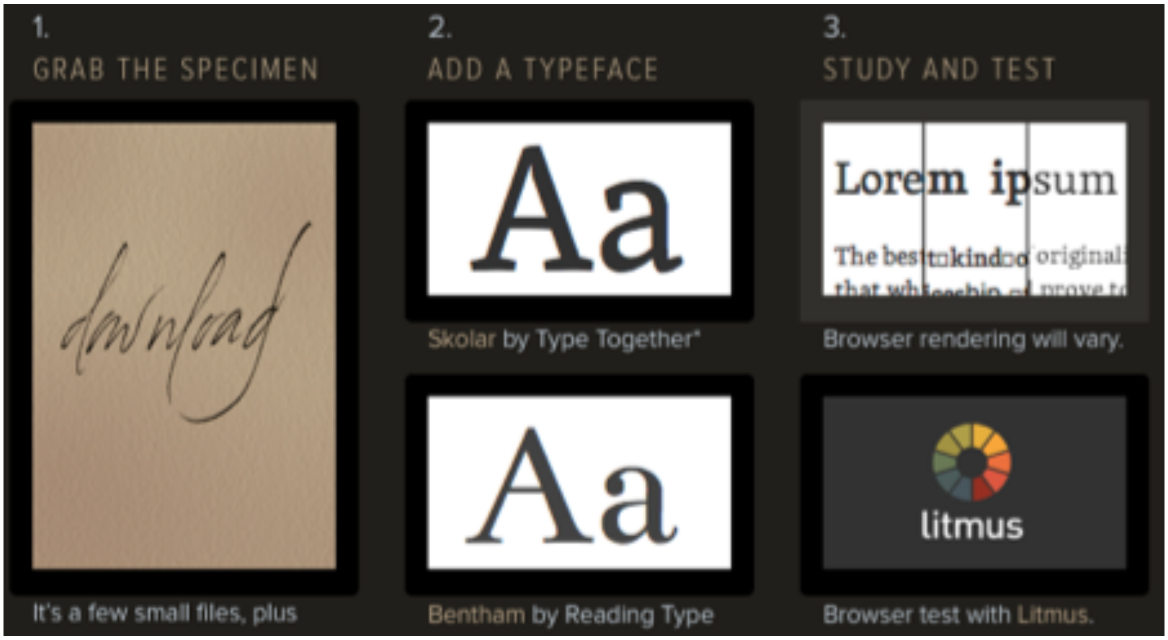
* Office 07+ Vista nati

118XB. Arial / Helvetica

The Smiths' dinner party been a success.

Web Font Specimen – See How Type Looks on the web

Once we had to keep our typographic choices to simple and minimalistic solutions, but today web designers have a wide variety of typography embedding techniques to enliven their designs with versatile and sophisticated typography. However, type is a tricky beast. What looks fine in print, can be quite difficult to read online. If you are using custom fonts you might want to test their screen display in various browsers.

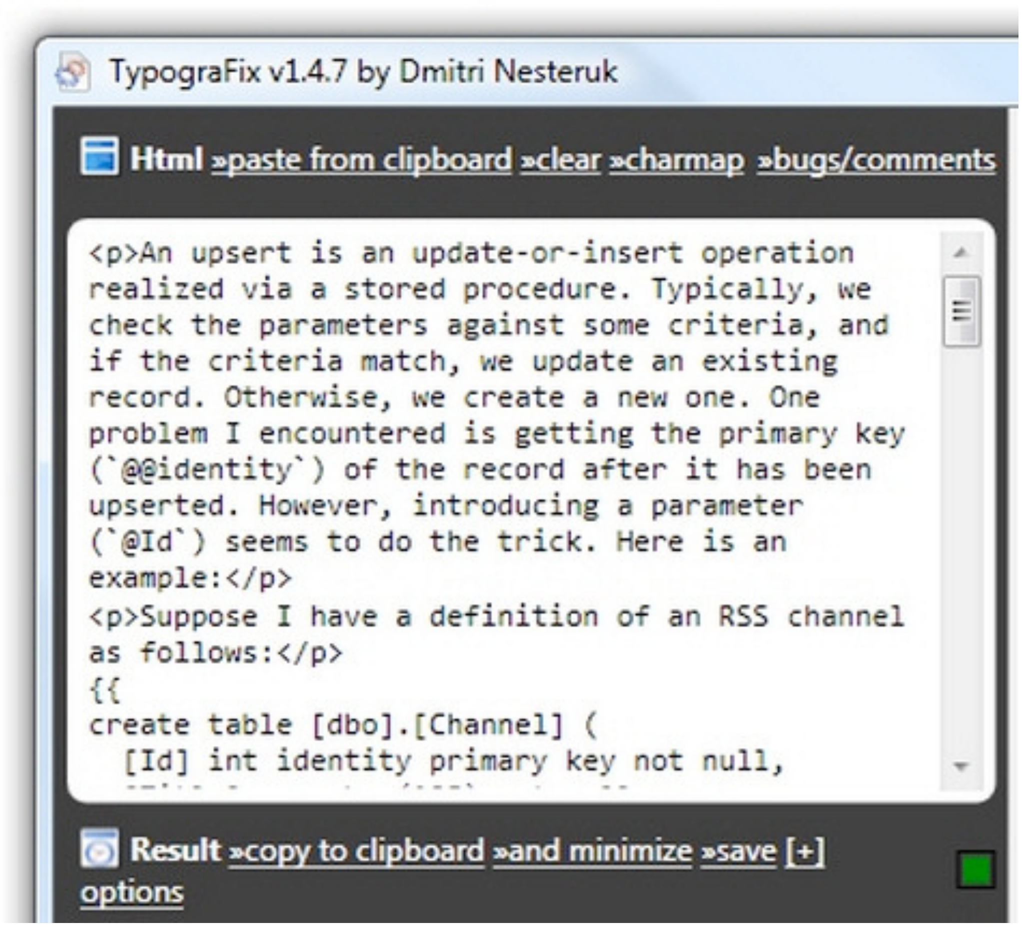


With the help of Web Font Specimen, you can do this easily. Just download the tool, unzip it, set your fonts in CSS, and then open up the HTML-specimen in a browser. The specimen contains whole paragraphs in various line heights and font sizes, different headings, ordered and unordered lists, as well as italic and bold text. You can analyze the body size comparison that reveals aspects of the typeface that can't otherwise be seen and study single glyphs, different measures (widths), grayscale text as well as light on dark or dark on light text.

With a few clicks, you get a reliable impression of what your font will look like in context. You can adapt the tool to your needs and share it with others under a Creative Commons licence.

Typografix – Fix Your Typography

In the current HTML standard, upholding certain principles of good typography is hard without a lot of extra work. Things like ellipses, en and em dashes, single and double quotation marks and arrows all become so cumbersome to properly format that designers sometimes leave them out entirely, leaving the browser to revert to its default. Sure, some blogging platforms already have solutions for these things, but what about web typography in general?

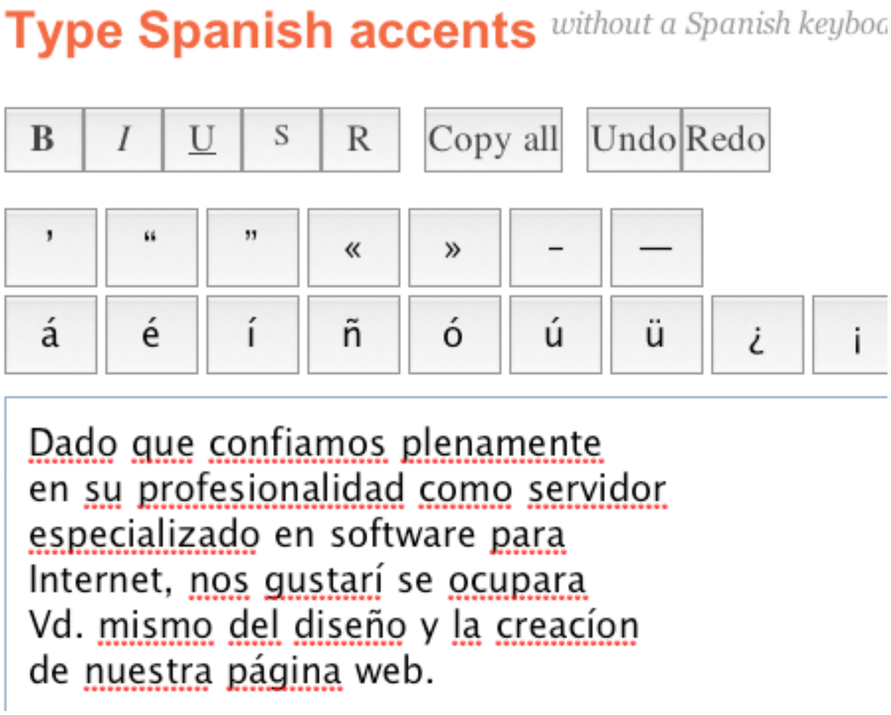

TypograFix v1.4.7 by Dmitri Nesteruk
Html »paste from clipboard »clear »charmap »bugs/comments
Result »copy to clipboard »and minimize »save [+] options

```
<p>An upsert is an update-or-insert operation
realized via a stored procedure. Typically, we
check the parameters against some criteria, and
if the criteria match, we update an existing
record. Otherwise, we create a new one. One
problem I encountered is getting the primary key
(`@@identity`) of the record after it has been
upserted. However, introducing a parameter
(`@Id`) seems to do the trick. Here is an
example:</p>
<p>Suppose I have a definition of an RSS channel
as follows:</p>
{{
create table [dbo].[Channel] (
  [Id] int identity primary key not null,
```

Typografix is an HTML re-processing script for creating beautiful typography. It corrects things like ellipses and smart quotes and adds tags for `<script>`, `<pre>` and `<code>` automatically. The **en dash**, for example, is created automatically when a hyphen is surrounded by spaces, and the **em dash** is created when two dashes appear in a row. Once you’re used to the syntax, creating well-formatted web typography is much faster and simpler than by hand-coding everything. Typografix is written in C#, requires Windows Installer 3.1 and .NET Framework 3.5 SP1 and is released under the GNU GPL v3. It would be great to see an AIR-application with the same features.

TypeIt – Typographic Accents Made Easy

Do you often find the need to edit body copy or emails in foreign languages with funny characters that for some reason do not display properly from the local keyboard? Then have a look at TypeIt.



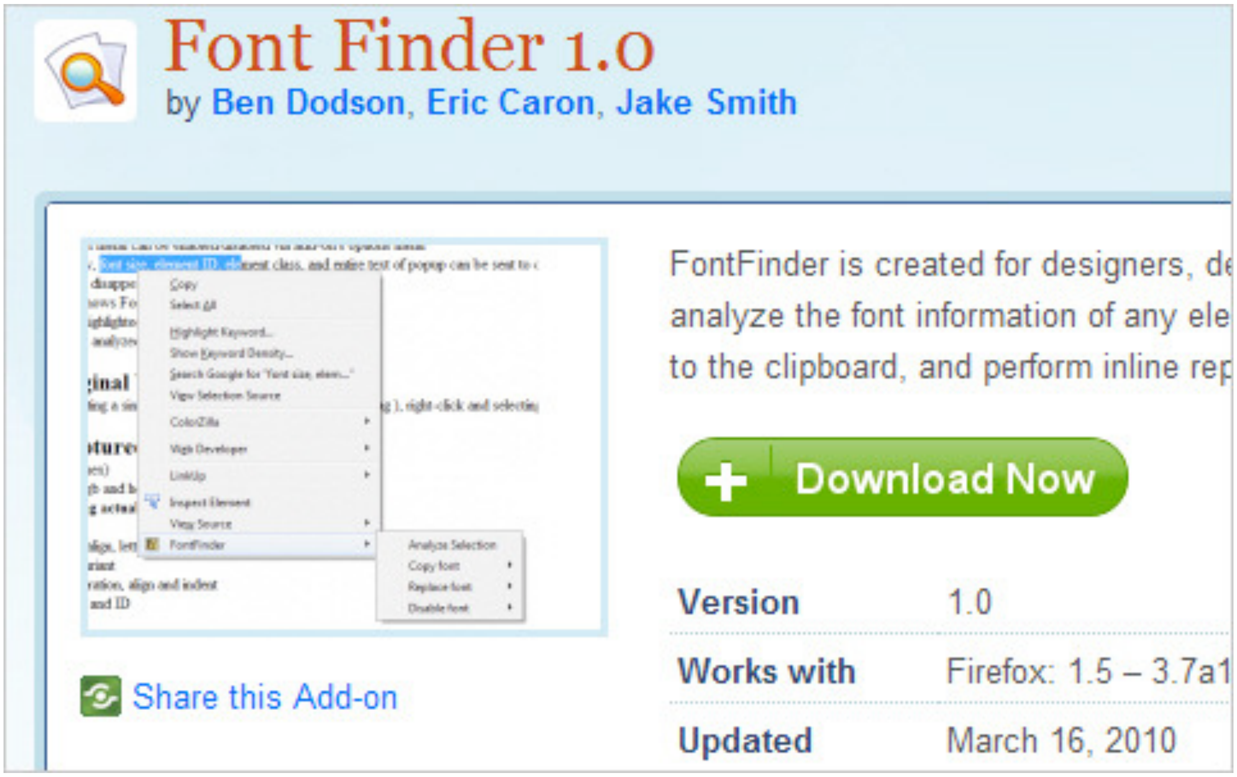
Dado que confiamos plenamente
en su profesionalidad como servidor
especializado en software para
Internet, nos gustarí se ocupara
Vd. mismo del diseño y la creacíon
de nuestra página web.

The online tool will save you a lot of time and vexation. Don’t strain your brain with hotkeys like *Alt + 134*; stop hunting around for special characters in a word processor as you use an email client or instant messaging service. TypeIt allows you to add typographic accents and special characters (e.g. punctuation marks) as you're typing. Instead of clicking on buttons for the accents, **you can use shortcuts**, like Control + N, to insert the characters: just point your cursor to the desired character and you'll see a tooltip.

Also, you can switch between character sets while typing; you can use bold, italics, underlining and superscript; and you can change the font and size. TypeIt has been developed by the Polish translator Tomasz P. Szynalski. The tool has full keyboard support for Internet Explorer 6+, Firefox, Safari, Opera and Chrome.

FontFinder – Check out Fonts in Web site Elements Easily

Font Finder is created for designers, developers and typographers. It allows a user to analyze the font information of any element on a page, copy selected parts of that information to the clipboard, and perform inline replacements in order to test new layouts.



Font Finder 1.0

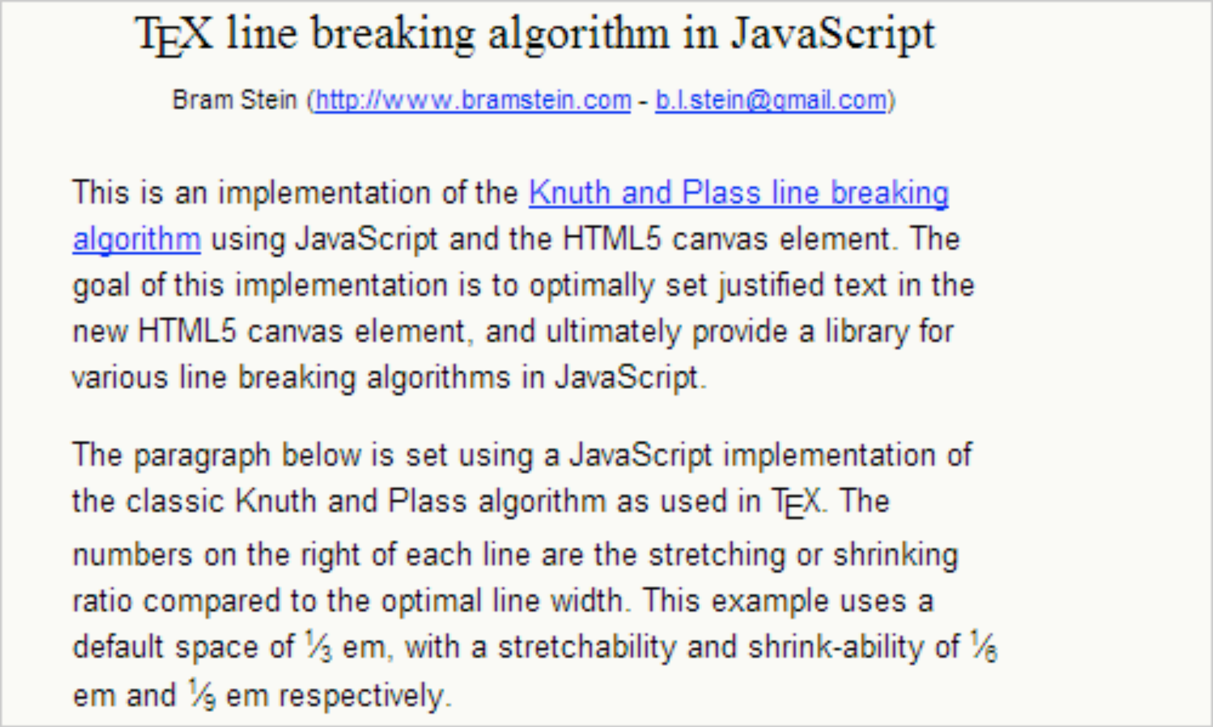
by Ben Dodson, Eric Caron, Jake Smith

FontFinder is created for designers, de
analyze the font information of any ele
to the clipboard, and perform inline rep

Version	1.0
Works with	Firefox: 1.5 – 3.7a1
Updated	March 16, 2010

TypeSet – Text Line Breaking Algorithm

TypeSet is an implementation using JavaScript and the HTML5 `canvas` element which is meant to optimally set justified text in the new HTML5 canvas element, and ultimately to provide a library for various line breaking algorithms in JavaScript.


TEX line breaking algorithm in JavaScript

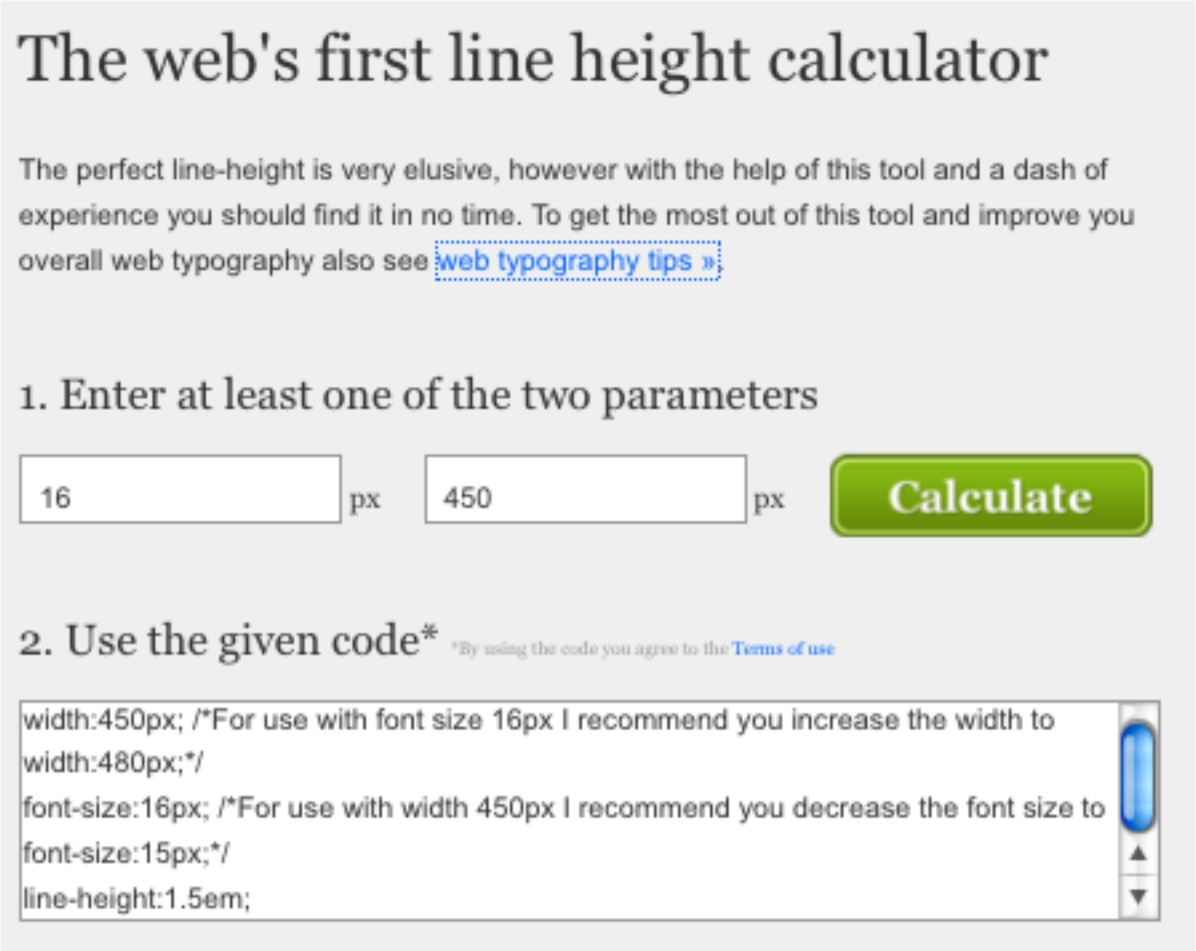
Bram Stein (http://www.bramstein.com - b.l.stein@gmail.com)

This is an implementation of the Knuth and Plass line breaking algorithm using JavaScript and the HTML5 canvas element. The goal of this implementation is to optimally set justified text in the new HTML5 canvas element, and ultimately provide a library for various line breaking algorithms in JavaScript.

The paragraph below is set using a JavaScript implementation of the classic Knuth and Plass algorithm as used in TEX. The numbers on the right of each line are the stretching or shrinking ratio compared to the optimal line width. This example uses a default space of ⅓ em, with a stretchability and shrink-ability of ⅙ em and ⅑ em respectively.

Perfect Typography – The Web's First Line Height Calculator

For finding the perfect line height you should not only consider the font size, but the line length as well. Text boxes should also not be to short, because jumping from one line to the other after a couple of words is as tiring for the eyes as following endless lines over the whole screen. Especially nowadays with the widespread use of wide screen monitors, liquid layouts can lead to very long lines thus reducing the user experience. Hence, width for text blocks should also be considered when defining the appropriate line height. In order to ease these estimations web designer Armin Cobo offers a line height calculator along with some tips and references to useful resources on Perfect typography.



The web's first line height calculator

The perfect line-height is very elusive, however with the help of this tool and a dash of experience you should find it in no time. To get the most out of this tool and improve you overall web typography also see web typography tips »

1. Enter at least one of the two parameters

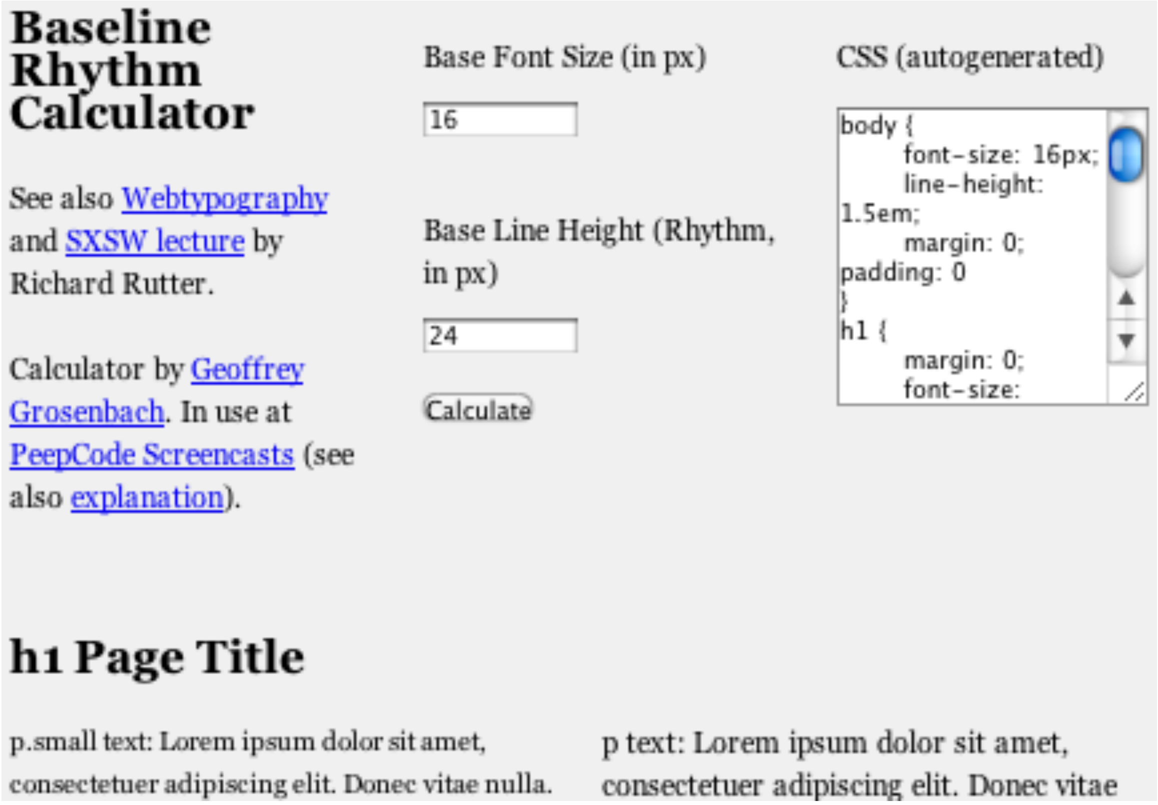
16 px 450 px

2. Use the given code* *By using the code you agree to the Terms of use

```
width:450px; /*For use with font size 16px I recommend you increase the width to
width:480px;*/
font-size:16px; /*For use with width 450px I recommend you decrease the font size to
font-size:15px;*/
line-height:1.5em;
```

Baseline Rhythm Calculator – Live View and Code Generator

Another tool concerning line height is Geoffrey Grosenbach's Baseline Rhythm Calculator. It takes you one step further than the mentioned tool and let's you create the CSS code for a consistent baseline throughout your Web site so that body text, headlines and other text elements with varying sizes will follow the same rhythm. Besides the auto-generated CSS style sheet you can also directly see the impact of a chosen font size and line height on a multi column page layout, as the following screen shot shows.



Baseline Rhythm Calculator

See also Webtypography and SXSW lecture by Richard Rutter.

Calculator by Geoffrey Grosenbach. In use at PeepCode Screencasts (see also explanation).

Base Font Size (in px)

16

Base Line Height (Rhythm, in px)

24

CSS (autogenerated)

```
body {
        font-size: 16px;
        line-height:
1.5em;
        margin: 0;
padding: 0
}
h1 {
        margin: 0;
        font-size:
```

h1 Page Title

p.small text: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Donec vitae nulla.

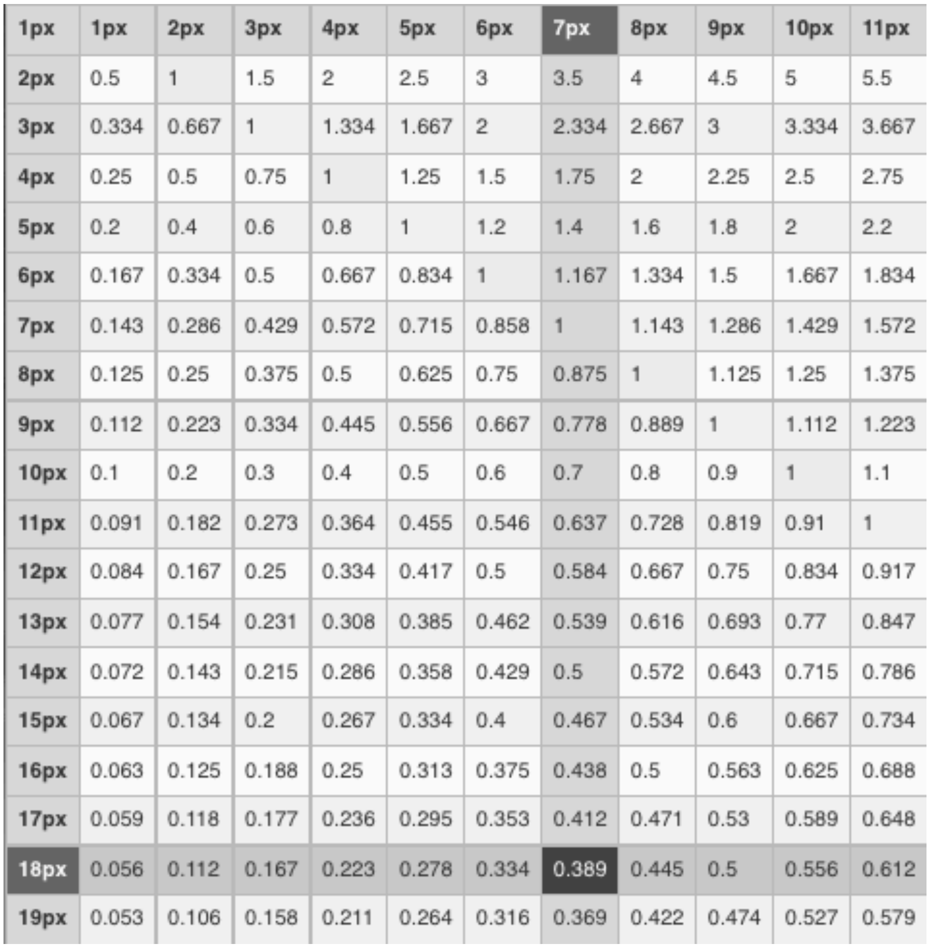
p text: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Donec vitae

EMCHART – Finding the Right Ratio at a Glance

As you have seen in the two examples above using a relative unit such as **em** is a great way to maintain the vertical rhythm of a web page when users resize text in their browser. On complex Web sites with lots of different font sizes for hierarchical headlines, body text and captions with bottom margins for proper spacing between headlines and body as well as paragraphs, calculating the respective em values might be time consuming and cause you some headaches.

Let's take an easy example: You've set a bottom margin 7 pixels under your H3 headline of 18 pixels. When the user scales the text size up on his or her browser the bottom margin won't scale and your vertical rhythm will crumble as the H3 grows in size but keeps the same 7 pixels of bottom margin unless you set this value in em. The **formula** for computing the EM multiplier is: **desired pixel size / current pixel size**

Instead of punching this formula into a calculator time and again, you can use this lookup EMCHART developed by Andy Ford with JavaScript.

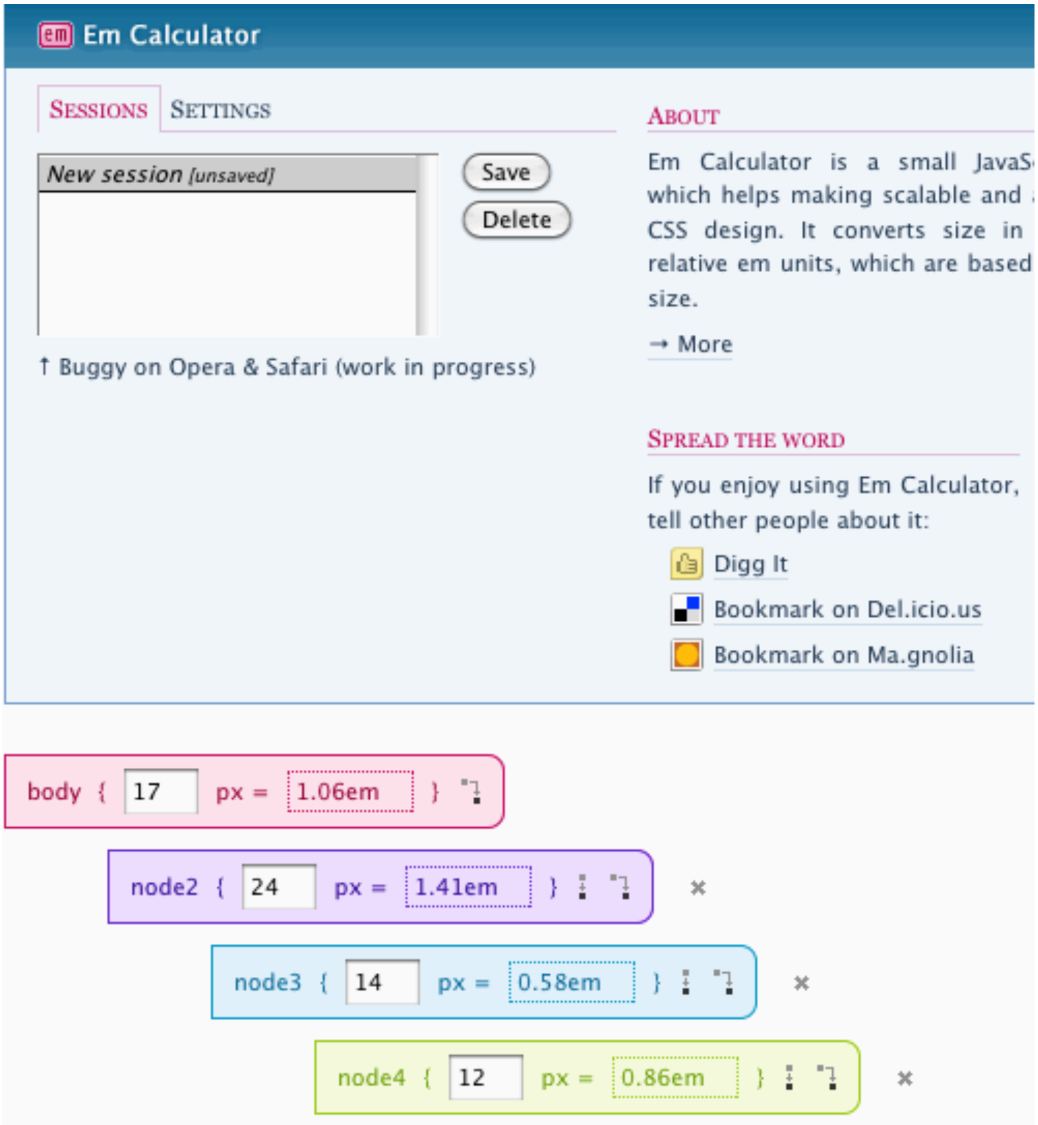


1px	1px	2px	3px	4px	5px	6px	7px	8px	9px	10px	11px
2px	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5
3px	0.334	0.667	1	1.334	1.667	2	2.334	2.667	3	3.334	3.667
4px	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75
5px	0.2	0.4	0.6	0.8	1	1.2	1.4	1.6	1.8	2	2.2
6px	0.167	0.334	0.5	0.667	0.834	1	1.167	1.334	1.5	1.667	1.834
7px	0.143	0.286	0.429	0.572	0.715	0.858	1	1.143	1.286	1.429	1.572
8px	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.125	1.25	1.375
9px	0.112	0.223	0.334	0.445	0.556	0.667	0.778	0.889	1	1.112	1.223
10px	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	1.1
11px	0.091	0.182	0.273	0.364	0.455	0.546	0.637	0.728	0.819	0.91	1
12px	0.084	0.167	0.25	0.334	0.417	0.5	0.584	0.667	0.75	0.834	0.917
13px	0.077	0.154	0.231	0.308	0.385	0.462	0.539	0.616	0.693	0.77	0.847
14px	0.072	0.143	0.215	0.286	0.358	0.429	0.5	0.572	0.643	0.715	0.786
15px	0.067	0.134	0.2	0.267	0.334	0.4	0.467	0.534	0.6	0.667	0.734
16px	0.063	0.125	0.188	0.25	0.313	0.375	0.438	0.5	0.563	0.625	0.688
17px	0.059	0.118	0.177	0.236	0.295	0.353	0.412	0.471	0.53	0.589	0.648
18px	0.056	0.112	0.167	0.223	0.278	0.334	0.389	0.445	0.5	0.556	0.612
19px	0.053	0.106	0.158	0.211	0.264	0.316	0.369	0.422	0.474	0.527	0.579

When converting design comps to HTML/CSS templates, this chart is very useful for calculating bottom margins, line-heights, top margins or top/ bottom padding among other things.

Em Calculator – Making Scalable and Accessible CSS Design

Em Calculator is a small JavaScript tool which helps making scalable and accessible CSS design. It converts size in pixels to relative em units, which are based on text size.



New session [unsaved]

↑ Buggy on Opera & Safari (work in progress)

About

Em Calculator is a small JavaS
which helps making scalable and
CSS design. It converts size in
relative em units, which are based
size.

Spread the word

If you enjoy using Em Calculator, tell other people about it:

body { 17 px = 1.06em }

node2 { 24 px = 1.41em }

node3 { 14 px = 0.58em }

node4 { 12 px = 0.86em }

Glossary

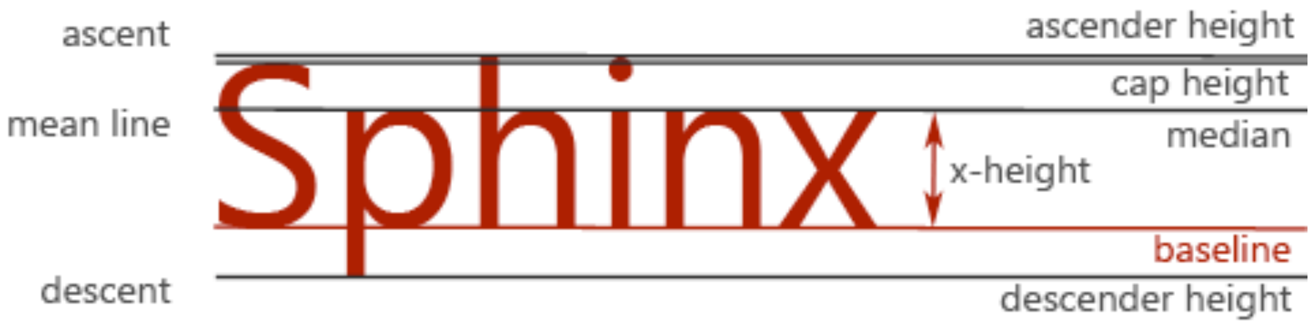
Manuela Müller

Antiqua

Antiqua is a German noun that translates to Latin script (derived from the female version of the Latin adjective antiquus, i. e. antiqua meaning ancient or „former; old"). Antiqua also refers to a class of typefaces which were designed between 1470 and 1600 in Italy by German and French craftsmen. The capital letters of this typeface class were inspired by the capital letters of Roman imprints, whereas the small letters were modeled on Carolingian minuscules in which medieval manuscripts on Roman emperors and philosophers such as Caesar, Seneca and Cicero were written. In the vernacular Antiqua is also used as synonym for serif typefaces.

Baseline

In order to achieve straight lines of text, letters are set on a baseline. Only descenders – the lower glyphs in „g" or „p" – go below this line.



Baseline Grid

A baseline grid is the foundation for consistent typographic rhythm on a page. It allows the reader to easily follow the flow of the text, which in turn increases readability.

Cap Height

The height of capital letters above the baseline is referred to as cap height. This especially applies to „flat" letters such as **L** or **T** (see illustration above).

Diacritic

Pronunciation symbol: A mark near or through an orthographic or phonetic character, e.g. **déjà-vu** in the French language or **Øre** in Norwegian or Danish language.

Glyph

One particular character or sign of a given writing system. This can either be a letter like „a" or a diacritic or ligature consisting of two or more letters. At any rate, a glyph represents a complete graphic unit.

Grotesque

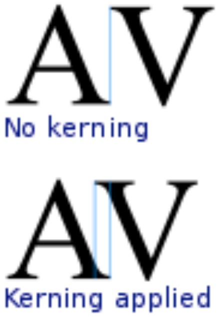
Grotesque or **Gothic** is a proper synonym for sans-serif typefaces. They were deducted from Antiqua type, but **sans** (french = without) serifs and the letters show a much more consistent stroke weight than serif typefaces.

Hanging Punctuation

Hanging punctuation is a way of typesetting quotation marks and bullet points. By not doing so a quotation mark that is flush with the text will interrupt the left margin and disrupt the rhythm of the reader. The use of hanging quotes keeps the left alignment intact and balanced therefore increasing readability.

Kerning

Characters in proportional fonts take up different amounts of space between them. By means of kerning the spacing between characters in proportional fonts is reduced thus forming a more consistent typeface.



Source: Wikipedia

Ligature

In typography a ligature occurs when two or more characters are joined to one single glyph or type, which were used in old printing machines. In the Western writing system ligatures are mainly used to reduce white space between two letters, i.e. letters are not joined to one glyph but the whitespace between them, for example, in letter combinations such as fi, ffl or ff. In modern desktop publishing kerning varies from font to font as you see below.

Left: Geneva with kerning (utmost left) and without kerning
Right: The Helvetica character set doesn’t contain glyphs for ligatures.

Macrotypgraphy

Typography comprises much more than the usage and design of fonts. It actually covers the complete arrangement of type, pictures, lines, areas and and typographic space in printed products or electronic media. The creative features of typesetting are devided in microtypography and macrotypgraphy. The latter concerns the following details:

- choice of paper / media format (HTML, Flash etc.)
- page format / screen resolution
- type area / screen layout
- line width, lead (space between lines), number of lines per page/screen
- positioning of pictures, tables and text
- proportion of type in relation to tables and graphics
- amount of whitespace
- font size and font decoration

Minuscule

A lowercase letter. One of the various writing styles in the Middle Ages (Carolingian Minuscule, blackletter minuscule) which was derived from the New Roman cursive alphabet that in turn was used for quick and informal every day writing. In contrast to officially used Roman square capitals that we can still see on ancient buildings, New Roman cursive uses small letters and ligatures thus forming a fluid handwriting. Cursive actually comes from the Latin word **cursivus** which means „flowing“.

Microtypography

This part of typography, also referred to as detail typography, deals with the subtleties of typesetting, which have a significant impact on readability and legibility of a given text:

- choice of fonts, font foundries or web font services
- fine tuning of the font size for body copy and headlines
- fine tuning of tracking/letter spacing/kerning
- fine tuning of leading and line widths
- special characters, small caps and ligatures
- correct application of punctuation marks

Majuscule

Modern uppercase letters of the Western writing system developed from the Roman uncial script. In most of the ancient writing systems there where both capital and small letters. However, documents where either written in small or capital letters. Only after the invention of the printing press, both sizes/writing styles where combined in one document. As small letters are more frequently used than capital letters, printers used to keep the type for small letters in the lower type case and the type for capital letters in the upper type case of a desk. This practice led to the name uppercase and lowercase letters.

Orphan

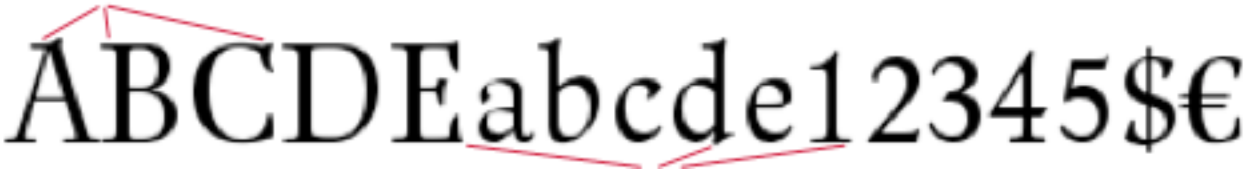
An orphan is a word or short line at the beginning or end of a column that is separated from the rest of the paragraph (see illustration).

Overshoot

Round or pointed capital letters like **S** or **B** deviate slightly in height from noun-rounded letters like **X** or **T** for the purpose of an equal optical appearance. The degree to which capital letters go below the baseline or above the cap height is called overshoot.

Serif / Serifs

Serif is both used as synonym for Antiqua fonts and as a noun for any of the short lines stemming from and at an angle to the upper and lower ends of the strokes of a latin letters, arabic figures or special characters as the red lines in the following graphic indicate.



There are a number of different thoughts, where serifs originated from. One of the most agreed upon is the explanation proposed by the Roman Catholic priest, teacher and calligrapher Father Edward M. Catich in his 1968 book „The Origin of the Serif" which says that serifs originated in ancient Roman inscriptions. Chiseling letters into stone created brush marks which flared at stroke ends and corners, thus creating serifs. The term itself, however, most likely comes from the Dutch word **schreef** meaning stroke.

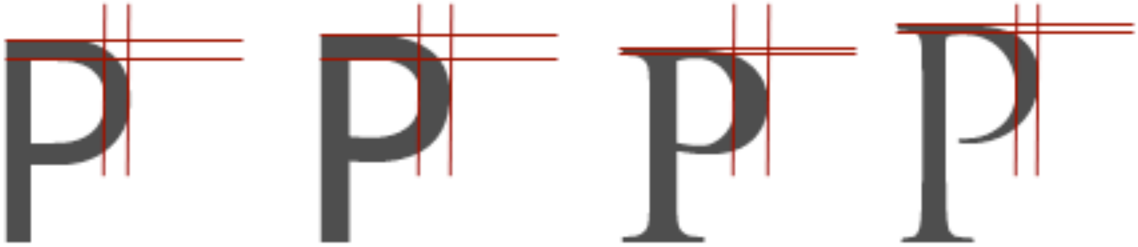
There's been a long and ongoing debate about whether or not the use of serif fonts increases the readability of a text. While this holds true for most Antiqua fonts, when printed – legibility tests showed that readers perceived such texts five times as quick as sans-serif print – for screen design sans-serif types such as Verdana are preferred. However, with increasing screen resolutions and methods such as anti-aliasing, font hinting and subpixel rendering serif fonts can also be properly displayed and read on screen today, if they are not too small. The former rule of thumb that sans-serif fonts are the better choice for screen design is more or less obsolete thanks to evolving technology standards.

Slab Serif

Egyptian or **Egyptienne** is another name for this class of type, which has been developed in the early 19th century. Slab serifs are basically bolded Antiqua typefaces, however, with much more distinct serifs. In the early days of industrialization the slab serifs where used for the upcoming advertising business on flyers and posters, where they made a bigger impression than the less bold and less expressive serif types. The term Egyptian is said to stem from the contemporary interest in anything ancient, especially Egyptian, due to the Napoleonic discoveries in Egypt at that time.

Stroke Weight

This term goes back to the physical width of a writing utensil and the subsequently thinner or bolder writing/script depending on the utensil's width. In modern desk top publishing font families come with different font weights, e.g. **light**, **regular**, **bold** or **semibold**. Furthermore, some typefaces vary in stroke weight within one particular font as the following illustration shows.



Widow

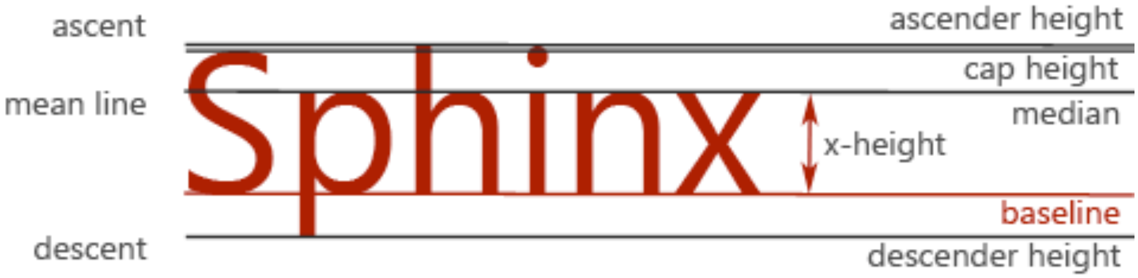
One single word in the last line of a paragraph (see illustration in paragraph 5. Widows and Orphans). Expressions for typographic terms vary in different languages. What's called a widow in English is a whore's child in German.

White Space

In microtypography white space or negative space is the free space around and within letters, e. g. the space within the P's bow in the illustration above. In macro typography negative space is the portion of a printed page or web page that is not filled with text or illustrations and – more generally – each and every unmarked space between margins, columns, lines of type or figures and other drawn or depicted objects.

X-Height

In typography, the **x-height** or **corpus size** refers to the distance between the baseline and the mean line in a typeface. Typically, this is the height of the letter *x* in the font, as well as the *u*, *v*, *w*, and *z*. (Curved letters such as *a*, *c*, *e*, *m*, *n*, *o*, *r* and *s* tend to exceed the x-height slightly, due to overshoot.) In modern typography the x-height is simply a design characteristic of the font, and while an *x* is usually exactly one x-height in height, in some more decorative or script designs, this may not always be the case.



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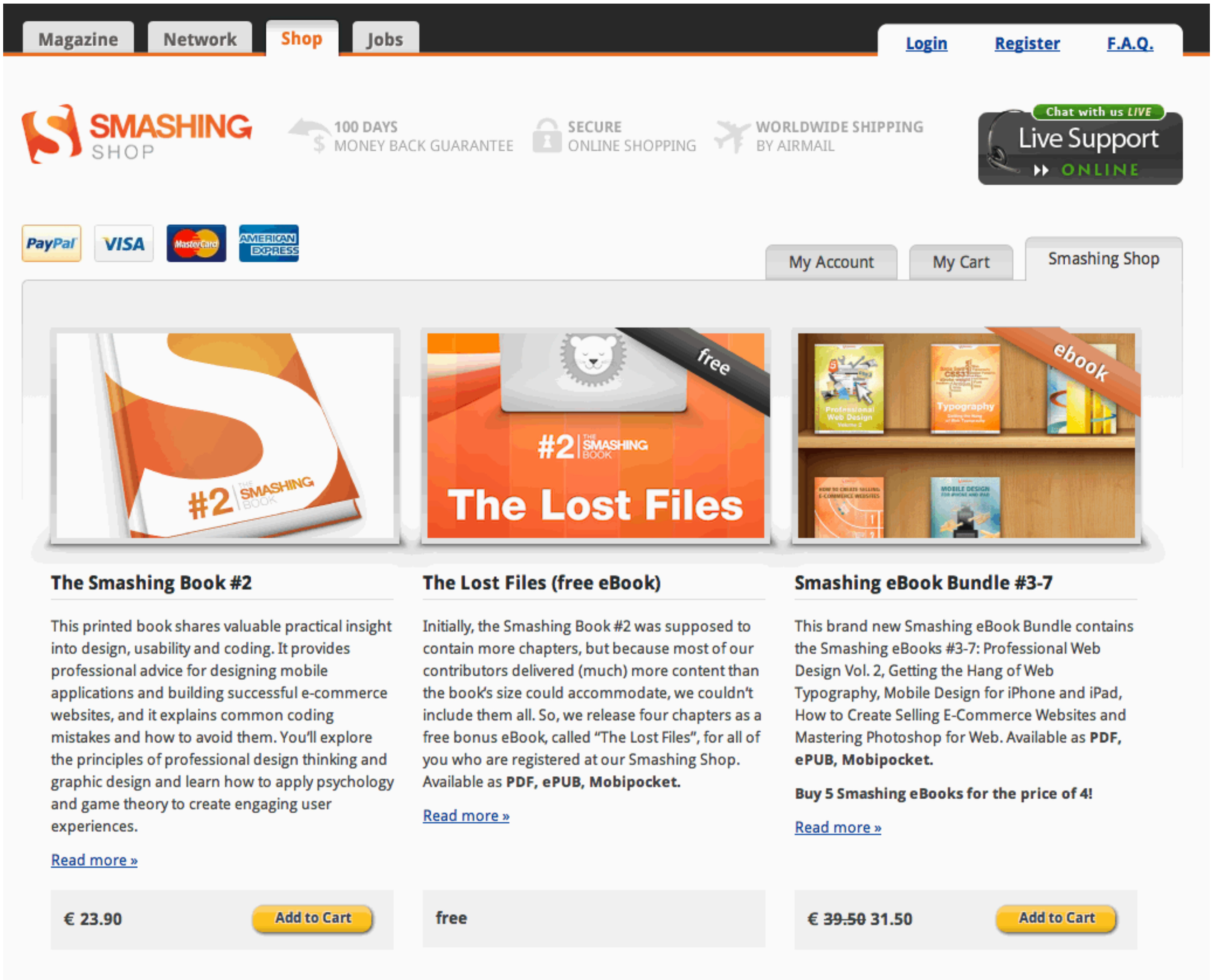
The Smashing Shop



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