Conquer Variable Web Typography

Venn by Dalton Maag
Oliver Schöndorfer  Designer

glyphhe  zeichenschatz
Schlafen Sie gut.
ColiCheck **wacht** über Ihr Pferd.

Informieren & absichern
Musik zur Hochzeit

REICH MIR DIE HAND, MEIN LEBEN ...

Nun ist er also da, der große Moment, einander das Ja-Wort zu geben. Die Liebe strömt warm durchs Herz, die Hände zittern, der Brautvater sucht verstohlen nach dem Taschentuch. Durch den
Wir sind Spitzenform

Hinter Spitzenform stehen Moritz Kobrna, Patrick Zesar und Stefan Daschek.

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MJOM CARDS

Play Web Trumps and battle
Snapchat vs. Skype

Web Trumps by MJOM Cards is the nerdy top trumps card game you’ve been waiting for! Featuring 32 uniquely designed cards of web and app companies, it’s the perfect gift for your techy web friends or your geeky self.
TAPAS
ENPANADES
CUATRO QUESOS
VIER KÄSERSORTEN
CAPRESE
Tomate, Mozzarella
POLLO
Hühnerfilet, Lauch, Käse
2 Stk. 5,20
FRAIENTALER
Hofkäs
4,60

SCHINKENKÄSE
- Flammkuchen
- Wurstsalat
- Speck-Zwiebel
- Birne-Gorgonzola
- Lachs-Spinat
- Apfel-Zimt
- 8,90

KÄSE TOAST
3,60

CIABATTA
- Salami, Käse
- Pesto, Rucola
- Mozzarella, Pesto
- Tomaten, Rucola
- 4,60

Kalobasa, Käse, Pesto, Rucola
- 4,60

Mozzarella, Pesto
- 4,60
IT'S TIME FOR

variable web

typography

by Oliver Schöndorfer

Variable fonts will shape the future of web typography as they offer plenty of possibilities for fine graded control over the display of type on screens. And that all at a relatively low file size. Time to say goodbye to endless debates about the number of font files you have...

This page uses the typeface Output Sans Variable by David Jonathan Ross. It's a variable font that can be adjusted on two axes to change its weight and its obliqueness. So I only have load one single font file of 57 KB to create the 18 different styles you can see on this site. It opens up new possibilities for designing with text on the web with a great number of typographic expressions for an incredibly small font file. So clearly, variable fonts are the new hot thing for every type nerd...
Are so many different styles really necessary?

Let's take a step back and ask ourselves why do we need different font styles at all? Typography gives words meaning through design, which means good typography can support the content, bad (or inappropriate) typography weakens it. Different styles of the same typeface make sense when they are unique enough to stand out. Concurrent they should be familiar enough by using the same design language. Compared to the regular weight, bold text emphasizes the meaning of something. It has to have a certain contrast to stand out, otherwise, it won’t do its job. Maybe semi-bold would not be different enough. The same goes with italic. Semi-Italic (or semi slanted – true italics are another topic on their own) do not make much sense for long reading text.

“Typography gives words meaning through design.”

But this guidelines mainly apply to body text or typography for long reading texts. Having a variety of weights might be beneficial for certain kinds of content, like page titles, headings or blockquotes, as you can see on this page. In that cases the typography can be more expressive and finely nuanced because the text usually is not that
18 font files

632 KB for web fonts only
1 font file

56 KB overall size
How to get started with variable fonts

1. What are variable fonts?
2. Using variable fonts on the web
3. Good times
4. Hard times
5. Getting started
What are variable fonts?
Variable font file
Aa  Aa  Aa  Aa  Aa  Aa  Aa  Aa  Aa  Aa  Aa  Aa

Interpolation
Named instances

Optional designs in between

Light  Regular  Medium  Bold  X-Bold
Aa  Aa  Aa  Aa  Aa  Aa 

weight axis
Using variable fonts on the web

Output Sans by DJR
Global support: 76% (Safari 11, Chrome 62, Edge 17, Firefox 62)

Mobile support in Germany: 90% (iOS Safari 11, Chrome 67 for Android)

caniuse.com/#feat=variable-fonts
Discover new variable fonts try them out, see where to get them
@font-face {
    font-family: 'Venn';
    src: url('Venn.woff2') format('woff2-variations'),
        url('Venn.woff2') format('woff2');
}

Will become the standard

Fallback for older browser versions
1. Select font or drop font file
2. See available axes and ranges
registered axes
Weight Axis
font-weight: 327;
font-variation-settings: "wght" 327;
font-weight: 327;

**High-level property**
will become standard with CSS 4 Font Module

font-variation-settings: "wght" 327;

**Low-level property**
supported by all participating browsers now
Width Axis

Venn by Dalton Maag
font-stretch: 78%;
font-variation-settings: "wdth" 78;
INTERMISSION

Hela by Jan Charvát
STRETCH
Don’t stretch me

transform: scaleX(1.25);
Don’t stretch me

transform: scaleX(1.25);
Don’t stretch me

font-stretch: 125%;
Don’t stretch me

font-stretch: 125%;
Don’t stretch me
transform: scaleX(1.25);

Don’t stretch me
font-stretch: 125%;
Italic Axis
font-style: italic;
font-variation-settings: "ital" 1;
Slant Axis
font-style: oblique 8deg;
font-variation-settings: "slnt" 8;
Optical Sizing Axis

Voto Serif by Google
Low contrast for small sizes

12px

24px

48px

72px

High contrast for large sizes

Voto Serif by Google
font-optical-sizing: auto;
font-variation-settings: "opsz" 72;
CUSTOM AXIS

Decovar by FontBureau
font-variation-settings: "TRMC" 1000,
"SKLA" 400,
"SKLB" 800, ...
Good Times
Folge 6: Kämpfen bis zur Selbstaufgabe

Die nächsten Aufgaben des Familienlebens klingen an Tanja – und Egon absonderlich nicht mehr. Doch dann macht Susanne plötzlich über sich Klarheit.
Folge 6: Kämpfen bis zur Selbstaufgabe

Die beiden Figuren vor der Selbstaufgabe...
Quirky spud boys can jam after zapping five worthy Polysixes.
Quirky spud boys can jam after zapping five worthy Polysixes.
Today we’re announcing the biggest change to Dropbox’s look in our 10-year history.

By Aaron Robbins and Nicholas Jitkoff.

As our mission has evolved from keeping files in sync to helping keep teams in sync, we realized our brand needs to change, too. Our new brand system shows that Dropbox isn’t just a place to store your files—it’s a living workspace that brings teams and ideas together. The look is expressive, with vibrant colors, rich imagery, a versatile typeface, and playful illustrations.

We’re excited to share it with you.

Visit the new Dropbox.com
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We’re excited to show it with

Welcome to the new Dropbox
WEB TYPOGRAPHY

A brief history

Rich typography has for years been the envy of many web designers, who long for the typographic variety, texture, and precision available in print media.

The first huge stride in typographic detail on the web was the introduction of web fonts, which allowed designers and developers to use many other fonts besides the handful generally available on user's operating systems.

Why were web fonts so exciting for designers? Jason Pamental put it eloquently, “typography is communication” but currently the web is “all system, no soul.” Web fonts teased the opportunity of bringing that “soul” to the web. Unfortunately for web fonts, to provide this soul, it comes at an...
Big text
medium and
small—all different strokes

Output Sans Hairline by DJR
Big text
medium and
small—all different strokes

Output Sans Hairline by DJR
Big text
medium and
small—all the same stroke

Safari

font-optical-sizing: auto;
supported by default

Output Sans Hairline by DJR
Big text
medium and
small—all the same stroke

Output Sans Hairline by DJR
Kontrapunkt

In close collaboration with Nippon Design Center of Japan, we designed a sound sensitive typeface for Chinese audio tech company Goertek. Based on surrounding sounds, it changes appearance by vibrating in different frequencies and wave types. The dynamic typeface is created for use on digital signage and wayfinding throughout Goertek's groundbreaking R&D hub in Qingdao, China.
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Overchoice
Many options make it harder and require much more knowledge
90 named instances
for Acumin Variable in Photoshop
Static Fonts

- Regular: 30 KB
- Italic: 30 KB
- Bold: 30 KB

Total: 90 KB

Variable Font

- Roman: 110 KB

Total: 110 KB
Static Fonts

- Regular: 30 KB
- Italic: 30 KB
- Bold: 30 KB

Total: 90 KB

Variable Font

- Roman: 110 KB
- Italic: 110 KB

Total: 220 KB
Single font

€ 30–60

Font family

€ 300–700
**Single font**

€ 30–60

**Variable font**

€ ?

Variable font: Roman 110 KB

**Font family**

€ 300–700
MutatorSans

This project consists of UFO source font data for a small 2 dimensional designspace.

- Weight and width axes, 2 intermediates.
- Intended for testing all sorts of variable and mutator math and making it not look entirely stupid.
- Contains components.
- Cubic outlines.
- Working minimal Variable Font, however without STAT table, or complete characterset
- I may or may not add to the characterset.

Building in RoboFont

- Install the Batch RoboFont extension.
Hosting and Renting
Buy 12 styles
Get variable fonts

Black[Foundry] strives to stay on top of the latest advancements in font technology. To help you get acquainted with the groundbreaking new font format, we offer you the Vesterbro variable fonts for free when you buy the full family.

Vesterbro

FREE TRIAL

BUYING OPTIONS

- Desktop
- Webfont
- App

VESTERBRO FULL FAMILY
- 12 fonts + 2 Variables -30% 344€

VESTERBRO ROMANS
- 6 weights + Variable -30% 172€

VESTERBRO ITALICS
- 6 weights + Variable -30% 172€

INDIVIDUAL WEIGHTS
- Vesterbro-Light 35€
- Vesterbro-LightItalic 35€
- Vesterbro-Regular 35€
- Vesterbro-Italic 35€

BLACK-FOUNDRY.COM/VESTERBRO
Variable Web Font
First Choice

Static Web Fonts
1st Fallback

Default System Fonts
Fallback
A Variable Font implemented with fallback fonts

Resize the browser window and see how the typeface on this page changes. On narrow screens the text is condensed to fit more words into one line, on bigger screens the body text gets wider. The heading is always at least slightly condensed to make a more compact appearance. This is done by only using one single font file.

How does it work? This page is set in the beautiful typeface Venn by Dalton Maag. It’s a variable font that can fluidly change its weight and width. If the browser does not support variable fonts, the fallback web fonts of Venn will be shown in Regular and Bold and there will be no condensed text. Toggle between the variable font and the fallback fonts to see the differences.

If you want to find out more about this read my article implementing a variable font with fallback web fonts. It will give you step by step instructions and explain all the details.
Variable fonts with fallback web fonts

A Variable Font implemented with fallback fonts

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cdpn.io/XxZzYV
Not supporting browsers will ignore this

h1 {
  font-size: 2.5rem;
  font-variation-settings: "wdth" 75;
}
h1 {
  font-size: 2.5rem;
  font-variation-settings: "wdth" 75;
}

@supports (font-variation-settings: normal) {
  h1 {
    font-size: 4rem;  // Only when variable fonts work
  }
}

glyph
IT'S TIME FOR
variable web
typography

BY OLIVER SCHÖNDORFER

Firefox 63
DevTools
Summing up

- **One font file** with many possible styles
- **Fine graded influence** for better typography – when you know what you’re doing
- **Improvements by default** with optical-sizing
- **Performance gain** under certain conditions
- **Use web fonts** as first fallback option
Resources

- **How to start with variable fonts on the web** by me: bit.ly/2NgHQId
- **Use a variable font with fallback web fonts** by me: bit.ly/2Dk22qY
- **For new releases** v-fonts.com & twitter.com/variablefonts
- **Testing variable fonts** axis-praxis.org & play.typedetail.com
- **List of available variable Fonts** by Indra Kupferschmid: bit.ly/2MC8QV9
- **Getting started with variable fonts** by Richard Rutter: bit.ly/2BwVViT
- **Use variable fonts in the real world** by Richard Rutter: bit.ly/2FLvttRc
- **TYPO Labs 2018** various talks: typotalks.com/labs
IT’S TIME FOR
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TYPOGRAPHY

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It’s time for variable web typography

BY OLIVER SCHÖNDORFER

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A quick introduction to variable fonts

One simple explanation I picked up during my research is, that variable fonts are one font file that behaves like many. Traditionally for every single font weight or style, e.g. italic, bold or light expanded you need to load a corresponding font file. With one OpenType variable font file, you can generate multiple individual font styles and that at a very granular level.
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Be more variable

Oliver Schöndorfer     zeichenschatz.net

@ glyphhe     @ zeichenschatz     glyphhe