E. Variable Gamut

E.1 STORYTIME

The **variable gamut** is the scope of all the things a letter can become in a typeface.
(This is a term I invented because it sounds cool and official.)

A traditional typeface's variable gamut consists of several standardized **axes** (plural of axis).
These axes define a range of possible forms for **glyphs** (or letters/characters) in the typeface.

There are four commonly used axes in type design:

- **Weight** ("wght"), e.g. light, normal, medium, etc.
- **Width** ("wdth"), i.e. how wide or condensed/narrow your font is
- **Italic/Slant** ("ital" or "slnt"), e.g. regular, italic
- **Optical Sizing** ("opsz"), i.e. adjustments based on how large or small your font displays at

You'll find some assortment of these in most typefaces.
This font, Jost*, has two axes: weight and italic/slant.

The least obvious axis is optical sizing. Here's an example with the typeface Libre Caslon:

This is a "text" version of a font meant for smaller sizes.

This is a "display" version of a font meant for larger sizes.

Even though both lines of text are 10.5pt, the bottom line appears smaller and harder to read.
This is because the **display** version is optically sized for much larger point sizes.

I'm a text font!

I'm a display font!

At 36pt, the display font looks much more appropriate. Meanwhile, the **text/body** font is clunky.

A **font** is one **cut** (i.e. version) of a typeface.
For instance, a font of the typeface Jost* could be Jost* Light at 10.5pt.

This term originated because fonts previously had to be physically manufactured, which obviously isn't the case any more.

"14 point UNIVERS LIGHT 3A" on sale at Etsy.

Meanwhile, a **typeface** is the family of all different fonts for a particular design of glyphs.

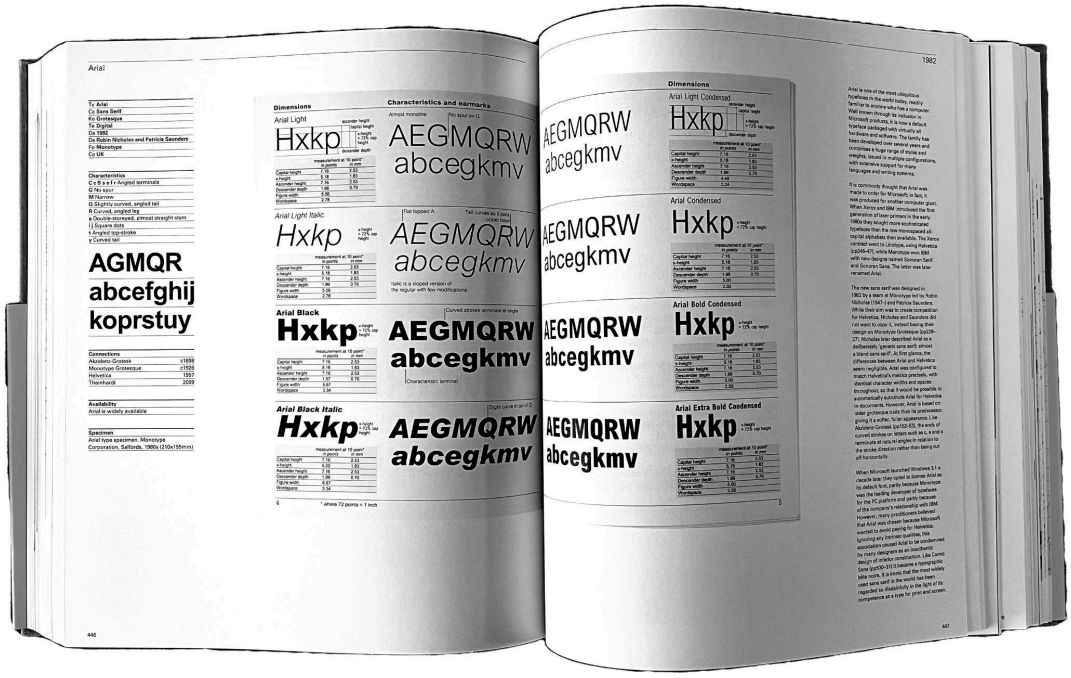
Nowadays, font and typeface are mostly synonymous.
Sometimes, we say **font family** as a compromise between the two definitions.

E.2 TASK

In this exercise, we will expand single fonts of various typefaces into full font families.

I've printed out copies of type specimens from The Visual History of Type by Paul McNeil.
These printouts are also in the class Drive.
Each of you will pick a type specimen to start working off of.
You can also look through the book and take a photo of one to work off of instead.

Here's an example of the specimen for Arial:



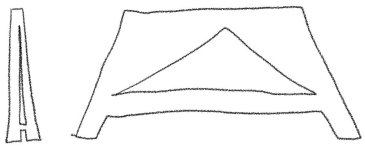
You'll be drawing the **contours** (i.e. outlines) of the glyphs for the typeface you choose.

This is a contour drawing for the uppercase "A" in Arial Light:

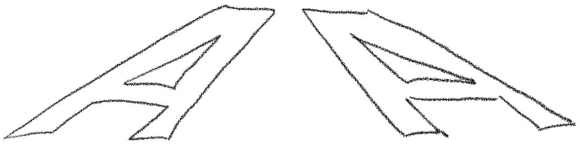
This is not a contour drawing:

Explore the typeface's variable gamut by drawing contours at different points of the previously mentioned variable axes: weight, width, italic/slant, and optical size.

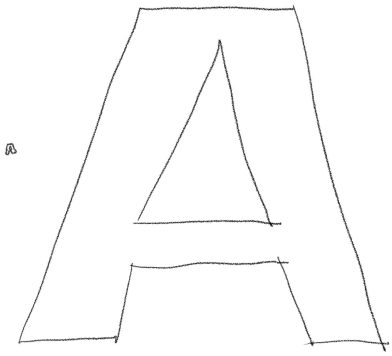
Let's take that previous contour and explore the extremes of the width axis:



The extremes of the italic/slant axis:



The extremes of the optical size axis:



Your goal isn't to create perfect drawings.
Try to see how the letterforms morph and distort to fit the different variable states.
Draw the extremes, and the in-betweens. Draw the extremes of the extremes, too.

To complete the exercise, draw the variable gamut of a serif typeface, a sans serif typeface, and a third typeface of your choosing.

E.3 PRESENTATION

We'll lay out your drawings on a table and see the variety of letterforms that emerged.