# Color design tools

Given a set of colors (probably hex, optionally rgb or lab, plus one or two pieces of metadata), I want to be able to

Plot them: AB + L (same as HC + L)

* Slider to modulate the range of L\* displayed on the AB plot
* Control over the size of the marks
* Tool tip to see all the values
* Gamut outline
* Both AB and CH axes (switch between them)

Select and group them. Names and annotations may come in with the metadata, should be editable in the app as well.

* Name individual colors
* name the groups
* Annotate
* compute centroid of groups
* List members

Add, delete, move individual colors

* Direct manipulation on plot
* Slider controls plus numeric input
* Do this for groups

Filter them

* LCH ranges
* With respect to groups

Computations on color sets

* Distance between them (delta E, delta L, C, H, ssLab distances)
* Clusters based on Lch, or lab (maybe seeded?)
* Align with color name space (use the distance function?)
* Normalize L\* steps within set.

Import/Export

* CSV (the workhorse. Output should export trivially into Tableau)
* Image, both in (like your demo) and out, out would be a formatted array of labeled colors.
* XML various formats (Tableau prefs, ColorPic xml, css)
* Eyedropper for input (always nice).
* I’m getting colors from Cristy Miller that are arrays of circles generated in Illustrator (see below). Some way to get it or something similar directly could be nice (while I’m wishing).

