

## ***Helpful Hints for Drawing and Modifying Letters:***

*(information provided by Jessica Hische)*

### **Four steps to drawing letters:**

1. Draw outline structure to get size proportions
2. Draw weight of structure
3. Draw class of letter - e.g type of serifs
4. Add stylistic elements - inline dots, drop shadows

### **How to make your drawn letters into vectors:**

Scan in your drawn lettering. Place it in Illustrator. **DO NOT USE LIVE TRACE.** (It will give you far too many points to make smooth letters) Live trace is the enemy of perfect curves! You will save significant time, and create a cleaner product by drawing from scratch. It is essential to learn to draw from scratch.

Instead, map at the extrema quadrant points. The extrema of a letter are the North, South, East and West points of the shape. *To find extrema points, draw a box around your letterforms and a box around the counters and where the letterforms hit the box that's where your anchor points will be. You may add extra anchor points, only if needed. The fewer points to define the letter, the more smooth it will be.* When tracing your letter with the pen tool, it is important to just get your points down and correct them later.

*Best Practices for creating letterforms with the pen tool:*

- Don't cross the streams of your anchor points, real or imaginary trajectories.
- Don't have your handle bars be so long that it crosses the intended path of another handle bar.
- Keep handle bars vertical/horizontal. To ensure that your handlebars come out perfectly horizontal, hold down the shift key. This makes it easier to manipulate curves.
- Make sure your handle bars are sharing the work load...  
If some are super short and others really long, balance them out.
- If you're trying to get a sharper curve and a sharper point and your handle bars cross, move your points.
- For tight curves, move your points closer to the curve rather than extending the handle.

### **Common mistakes for beginners:**

1. For script — remember thick strokes are the down stroke and thin strokes are the up stroke
2. Too many swirls — keep the word the focus
3. W (don't weight outer strokes, same with M) weight the 1st & 3rd for W and the 2nd & 4th for M
4. Make bowls of R & B the same
5. N diagonal thicker than verticals
6. Serifs should be close to or touching baseline and cap height of the letter.
7. Curvature of the letter should dip below the baseline and go beyond cap height. The surface area of the curvature touching the baseline should equal the width of the base of other letters.
8. Letters can be asymmetrical. Not all letters are created equal.
9. Avoid outlining strokes and merging them with shapes, because Illustrator will place points wherever it wants. Retracing the shape will ensure smoothness.

**Helpful Hints:**

The structural (anatomical ) parts of the letters are always in place to manage negative space of the letter. For example, the cross bar on the “e” sits in a different place than the “f” crossbar to equal out the negative space in the letterforms.

Rounded corners emulate the softness of the printed letterforms. Rounded corners exist on all edges of the letterform. Rounded corners do not exist on structural joiners of the letter (where the cross bar meets the letter).

Serifs are not the same length. Longer end is slightly longer to eat up negative space and not look so stubby.

*Tip: The thinnest part of your serif should not vary in size from the thinnest point of your letterform.* There’s a lot of symmetry and asymmetry built into letter forms.

Letterforms: the crossbars in a letter are there to manage negative space.

If you take a look at the crossbar of the E and F in Adobe Caslon you will see they are not on the same line.

F crossbar lower to balance negative space. The original letterforms made/cast in metal didn’t have rounded edges, but when printed on paper the edges would soften. So the rounded bits on the serif are there to emulate the softness of the letterforms as they were printed on paper.