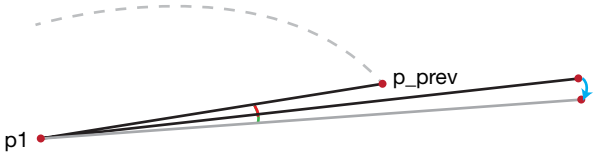
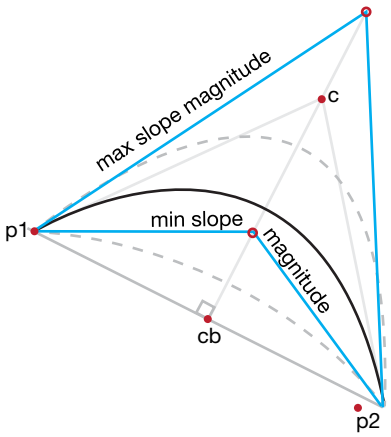
Params.min_linear_acuteness



If the angle p_prev,p1,p2 doesn't pass Params.min_linear_acuteness (ie. is too narrow and thus hard to detect/draw), shift p2 away from p_prev, so long as:

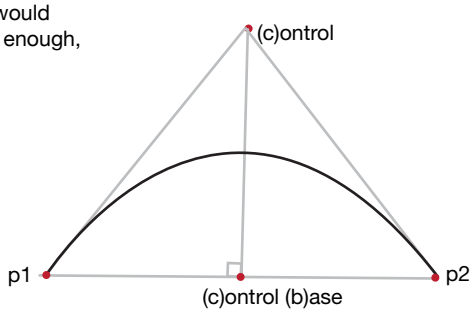
a) this doesn't push p2 off the screen; and
b) p2 isn't the original starting location

Params.slope_magnitude



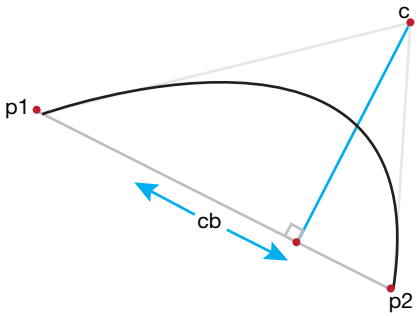
This sets the height of the control point above it's base based on a random choice between upper and lower bound in the param. Rather than being an absolute height, this value actually sets the acuteness of the angle from the the closer of p1 or p2 to the control point (in this example, the control is equidistant to p1 & p2 so this detail is irrelevant). I did it this way because the absolute height can be imperceptable or intractably abrupt, depending on the distance between p1 and p2, whereas slope is a much more salient and relative feature.

A value of 0 would result in a curve with no slope (ie. a line) and a value of 1 is impossible as it would define p1->c as a 180° line and, obviously enough, parallel lines don't interesect.



Basic Curve Reference

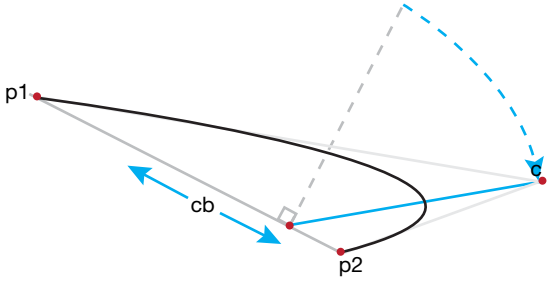
Params.peak_shift



Moves the control base away from the midpoint of p1->p2; the setting determines the *magnitude* of the shift, but the direction of the shift (ie. toward or away from p1) is determined by a coin tosss for each curved segment.

A value of 0 would result in a bell-curve shape where cb and c extend from the midpoint of p1->p2. A value of 1 extends cb to c *from* either of p1 or p2, producing essentially a right triangle.

Params.curve_sheer



Whereas normally, and in both previous settings, the line from cb->c was perpendicular to the line p1->p2, sheer moves c without moving cb.

A value of 0 results in no sheer; cb->c remains perpendicular to p1->p2. A value of 1 creates infinite sheer (so don't do that). Basically small values for sheer will appear to do very little, whereas large values get ludicrous quickly; the salience of sheer also varies a lot with peakshift. The major contribution of sheer to the resulting curve is that it can beging by curving *away* from either of p1 or p2 (again; coin toss).