

Kai's Power Tips #15

One Minute Quickies: Instant Spirals

Why?

Beats me. Just so. I guess because life is ever spiraling towards something.

So?

How to draw a circle is easy. Use the elliptical marquee tool with the option key down, then Edit > Stroke to draw a neat circle. Anti-aliased, the lot. Fine.

But where is the spiral tool? In ANY app...? Do you need to scan the damn things in?
Nah. It's trivial: Twirl a gradient! Use the blend tool click and drag just a pixel or two:



Figure 1a)



Figure 1b)

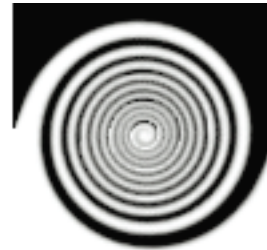


Figure 1c)

Simply start with this or similar and use the twirl filter, here set at 333 and used a few times.



Figure 2a)



Figure 2b)

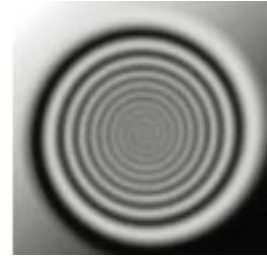


Figure 2c)

If the gradient is a real blend then the twirl starts soft and retains the slightly blurred quality.

An especially clean spiral can be had with the following addition: Use something like 2 a), a full screen diagonal gradient with the blend tool. Now run the Pinch filter, here set at 99 and run a few times. This will draw the shades towards the center resulting in this nippleoid shape: fig 3 a) starting the twirl with this gets fig 3b). Notice how much cleaner that is than 1c) or 2c)

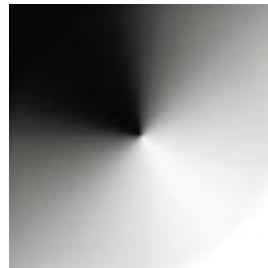


Figure 3a)



Figure 3b)

the nipple induced award winning clean spiral

Just in case you were not aware of the mathematically obvious reality: There are always errors associated with conversions and filters. These get exaggerated with larger settings. Compare how the twirl filter set at “999” (using fig 1a as a start) has rather serious aliasing artifacts, compared rather setting it to “111” and simply running it 9 times successively. A lot cleaner. The values mentioned in this document are only accurate for the sample image size. With larger windows you will have to apply larger settings



Figure 4a) Figure 4b)
Setting Twirl at “999” ? No, rather nine times “111”

Talk about aliasing error. It is rather cute to Un-Twirl by using one horizontal flip and then continuing to twirl. Here the flipped version of 4b) is un-twirled nine times, with the aliasing error left. If you do it after a couple of steps, the error is very slight. Compounding losses have built up here. In fact, I kinda like it and use it even. An odd circular blur. (Try this with other complimentary filters, such as +99-99 Spherize...)



Figure 5a)



Figure 5b)

Twirling the horizontally flipped spiral gets you back to the starting position, almost...

If you have faithfully followed the other KPTs you will have learned about neat selection tricks in #14. Taking 4b) and duplicating it into an alpha channel and load it as a selection, then using a blend and later the opposite blend with the Inverse Selection gets very nice alternate styles easily. If you didn't get this read #14...

Figure 6) The Inverse Selection double gradient trick...



Figure 7) and then of course, in color its all a lot more fun anyway...



Try spiraling in the Hue and Saturation channels separately, as seen in fig 7) Also, combine other filters in between spiraling, such as converting to polar coordinates, spiral in that domain and convert back. Sometimes values that don't create full spirals have great effect, too. You can get some beautiful space curves, color swirls for backgrounds, tiling, etc.

Figure 8) Spiraling in combination with other distort filters



This ought to set your pixels gyrating for a while...Have fun in orbit.

Tell a friend if you find these tips tops.

Happy Photoshopping, Kai Krause